

**REMEDIAL ACTION PLAN  
HAYWARD PARK CALTRAIN STATION  
401 Concar Drive  
San Mateo, California  
SMCEH Case No. 119191**

**May 2022**

*Prepared for:*  
HPS – San Mateo, LLC  
901 Mariners Island Boulevard, Suite 700  
San Mateo, California 94404

*Prepared by*



711 Grand Avenue, Suite 220  
San Rafael, California 94901  
415/460-6770 Fax 415/460-6771  
main@westenvironmental.com

## TABLE OF CONTENTS

SECTION	PAGE
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1 BACKGROUND.....	1
1.2 REMEDIAL PLAN ORGANIZATION .....	3
<b>2.0 SITE DESCRIPTION.....</b>	<b>4</b>
2.1 GEOLOGIC SETTING.....	4
2.2 HYDROGEOLOGIC SETTING .....	5
2.3 SITE HISTORY .....	6
2.3.1 Leslie Salt .....	6
2.3.2 L.C. Smith Asphalt Company.....	7
2.4 SURROUNDING AREAS .....	7
2.4.1 Station Park Green Project - 1700 South Delaware .....	7
2.4.2 470 Concar Drive .....	8
2.4.3 Vail Burner & Oil Company - 1741 Leslie Street.....	9
2.5 SURFACE WATER.....	10
2.6 SITE USE .....	10
<b>3.0 SUMMARY OF INVESTIGATIONS.....</b>	<b>11</b>
3.1 PREVIOUS INVESTIGATIONS.....	11
3.1.1 Soil, Soil Gas and Groundwater Sampling - 2016 .....	11
3.1.2 Soil and Groundwater Investigations – 2019-2021.....	14
3.2 RECENT INVESTIGATIONS.....	17
3.2.1 Soil Sampling.....	17
3.2.2 Soil Gas Sampling .....	18
3.2.3 Depth-Discrete Groundwater Sampling.....	22
3.2.4 Groundwater Monitoring Well Sampling .....	22
<b>4.0 DATA EVALUATION .....</b>	<b>24</b>
4.1 CONCEPTUAL SITE MODEL.....	24
4.1.1 Nature of Site Groundwater .....	25
4.2 SCREENING LEVEL ASSESSMENT .....	28
4.2.1 Current and Future Potential Exposure Pathways.....	29
4.2.2 Tier 2 ESL Soil Screening Levels.....	30
4.2.3 Tier 2 Soil Gas Analysis .....	33
4.2.4 Tier 2 Groundwater Screening Levels.....	34
4.2.5 Background Concentrations .....	35
4.3 COMPARATIVE ANALYSIS .....	36
4.3.1 Soil Conditions .....	36
4.3.2 Soil Gas Conditions.....	38
4.3.3 Groundwater Conditions .....	39
4.3.4 Data Gap Analysis.....	41
4.3.5 Soil Remedial Goals .....	41
4.3.6 Soil Gas Remedial Goals.....	43
4.3.7 Groundwater Remedial Goals .....	43
<b>5.0 REMEDIAL ACTION IMPLEMENTATION .....</b>	<b>45</b>

## TABLE OF CONTENTS

SECTION	PAGE
5.1 REMEDIAL ACTION PLAN OBJECTIVES .....	45
5.2 PRE-REMEDIAL ACTION IMPLEMENTATION ACTIVITIES .....	45
5.2.1 Public Participation .....	46
5.2.2 Permitting.....	46
5.2.3 Health and Safety .....	47
5.2.4 Utility Clearance .....	47
5.2.5 Storm Water Controls.....	48
5.3 REMEDIAL ACTION IMPLEMENTATION .....	48
5.3.1 Site Control.....	48
5.3.2 Monitoring Well Destruction .....	48
5.3.3 Soil Excavation.....	49
5.3.4 Soil Handling.....	49
5.3.5 Post-Excavation Soil Sampling .....	51
5.3.6 Engineered Fill.....	52
5.3.7 Post Backfill Soil Gas Sampling.....	53
5.3.8 Contingent Vapor Intrusion Mitigation System.....	53
5.3.9 Post-Construction Monitoring.....	55
5.4 REMEDIAL ACTION IMPLEMENTATION REPORT .....	56
<b>6.0 REFERENCES.....</b>	<b>57</b>
<b>7.0 DISTRIBUTION LIST .....</b>	<b>60</b>

## **LIST OF TABLES**

Table 2-1	Summary of Groundwater Elevation Data
Table 3-1	Summary of Soil Analytical Results - TPH and VOCs
Table 3-2	Summary of Soil Analytical Results - SVOCs, Pesticides and PCBs
Table 3-3	Summary of Soil Analytical Results - Metals
Table 3-4	Summary of Groundwater Analytical Results - TPH and VOCs
Table 3-5	Summary of Soil Gas Analytical Results - VOCs

## **LIST OF FIGURES**

Figure 1-1	Site Location Map
Figure 1-2	Site Layout
Figure 2-1	Site Development Area
Figure 3-1	Site Detail and Sampling Locations
Figure 3-2	Summary of Soil Analytical Data
Figure 4-1	Exposure Pathways Chart
Figure 5-1	Contingent Vapor Barrier Location

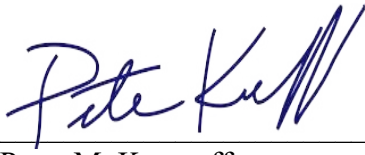
## **LIST OF APPENDICES**

Appendix A	Selected Development Plans
Appendix B	Boring Logs
Appendix C	Field Data Forms
Appendix D	Laboratory Analytical Data and Chain-of-Custody Forms



## SIGNATURE PAGE

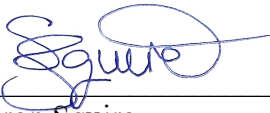
All information, conclusions and recommendations contained in this report have been prepared under the supervision of the undersigned professional(s).



Peter M. Krasnoff  
California Registered Civil Engineer (44031)



May 4, 2022  
Date



Sharon Squire  
California Professional Geologist (8400)



May 4, 2022  
Date

## 1.0 INTRODUCTION

This *Remedial Action Plan* (“RAP”) has been prepared by West Environmental Services & Technology, Inc., (WEST) for the Hayward Park Caltrain Station property located at 401 Concar Drive in San Mateo, California (“the Site; Figure 1-1”). This *RAP* presents a summary of: Site and surrounding property histories; subsurface investigations; a comparison of Site data with applicable screening levels; development of remedial goals; and proposed remedial actions.

### 1.1 BACKGROUND

The Site is located on a triangular portion of land that is currently used as the Hayward Park Caltrain station with associated parking areas. L.C. Smith Company Asphalt Plant was historically located on the Site and the eastern portion of the adjacent property located at 1700 South Delaware Street. In 2018, the Peninsula Corridor Joint Power Board (PCJPB) approved development of the Hayward Park Caltrain Station into a mixed commercial-residential property with subterranean parking.

The adjacent property at 1700 South Delaware Street has been redeveloped for mixed-use commercial and residential use as part of the Station Park Green Project, with San Mateo County Environmental Health Services Division (SMCEH) as the lead agency for oversight (Case No. 119181). Laboratory analysis of soil and groundwater samples collected during pre-development sampling at the Station Park Green Project border with the Site revealed total petroleum hydrocarbons (TPH), including diesel (TPHd) up to: 4,100 milligrams per kilogram (mg/kg) in soil (B-30); and 120,000 micrograms per liter (µg/l) in groundwater (B-12). Laboratory analysis of samples revealed TPH in the motor oil range (TPHmo) up to 30,000 mg/kg in soil (B-30) and 8,700 µg/l (B-12) in groundwater; and TPH in the gasoline range (TPHg) up to 340 mg/kg in soil (B-30) and 19,000 µg/l (B-12) in groundwater.

On January 20, 2016 SMCEH emailed PCJPB with a concern that contamination removed from soil at the Station Park Green Project boundary with the Site “appeared to extend or originate

from the Caltrain parking lot” and that L.C. Smith operated an asphalt plant predominantly on the Site until the 1970s (SMCEH, 2016).

In May 2016, WEST advanced 24 borings at the Site to support redevelopment of the Site. The sampling data from the May 2016 investigation revealed the presence of TPHd in: soil up to 14,700 mg/kg; and groundwater up to 11,700 µg/l (W-12). The investigation also revealed the presence of: lead in soil up to 2,610 mg/kg; and pesticides and semi-volatile organic compounds in soil.

On April 18, 2018, the SMCEH opened environmental oversight Case File 119191 under its Voluntary Cleanup Program for the Site to address the presence of diesel and motor oil. On October 16, 2018, SMCEH requested a scope-of-work to define the lateral and vertical extent of contamination at the Site. On behalf of the PCJPB, ERM of Walnut Creek, California submitted its *Work Plan* for subsurface investigations of the Site on January 4, 2018 (ERM, 2018). The *Work Plan* presented a summary of the WEST 2016 data and proposed advancing eight additional soil borings at the Site for collection of soil and groundwater samples for analysis of TPHg, TPHd, TPHmo and the petroleum related volatile organic compounds, benzene, toluene, ethyl benzene and xylenes (ERM, 2018). Subsequently, ERM, on behalf of the JPB installed and sampled groundwater-monitoring wells in 2021.

In October 2021, WEST prepared its *Supplemental Site Investigation Work Plan (SSIWP)* to address data gaps, including: delineating the extent of chemicals in soil above applicable screening levels; collection of additional soil gas data to evaluate temporal variability in concentrations; and sampling of groundwater-monitoring wells to verify previous findings.

The Site is currently planned for development including the construction of a multi-story podium style mixed-use structure, with commercial uses at-grade and residential above. In addition, portions of the Site, including at-grade portions of the building, will continue to be used for parking.

Based on the findings from the investigations, WEST has developed this *RAP* to address the presence of: TPHd in soil; and trichloroethene (TCE), chloroethene (CE; also known as vinyl chloride), 1,2-dichloroethene (1,2-DCA), benzene, ethyl benzene and naphthalene in soil gas. The proposed remedial actions include: excavating soil above remedial goals; post excavation confirmation soil sampling; and backfilling with engineered fill. Following backfill, soil gas sampling will also be conducted to determine the need for a contingent vapor intrusion mitigation system (VIMS) beneath occupied portions of the ground floor of the proposed building. Following remediation, institutional controls will be implemented to limit future sub-surface activities on the Site.

## **1.2 REMEDIAL PLAN ORGANIZATION**

The Remedial Action Plan is organized as follows:

- Site Description (Section 2.0);
- Summary of Investigations (Section 3.0);
- Data Evaluation (Section 4.0); and
- Remedial Plan Implementation (Section 5.0).

## **2.0 SITE DESCRIPTION**

The approximately 2.81-acre Site is located at 401 Concar Drive in San Mateo, California with assessors parcel number 035200998. The Site is relatively flat at approximately 8-feet above mean sea level (MSL) with a gently slope toward San Francisco Bay to the east. The Site is currently used for the Hayward Park Caltrain station with associated parking areas, but future development is contemplated for a mixed commercial-residential property with potential subterranean parking. The Site is bounded by: the railroad corridor owned by the PCJPB to the west; Concar Drive and Highway CA 92 to the south; Station Park Green Redevelopment project to the east; and a grassy area adjacent to the railroad to the north.

### **2.1 GEOLOGIC SETTING**

The Site is located in the Santa Clara Valley Groundwater Basin - San Mateo subbasin, which occupies a structural trough, sub-parallel to the northwest trending Coast Ranges, at the southwest end of San Francisco Bay. San Francisco Bay constitutes its eastern boundary. The Santa Cruz Mountains form the western margin of the San Mateo basin. The basin is composed of alluvial fan deposits formed by tributaries to San Francisco Bay, that drain the basin (DWR, 2004). Alluvium was encountered at the property immediately west of the Site to approximately 60-feet below ground surface (GeoCon, 2016).

The Site was historically bay margin marshland. Filling of the area near the Site occurred from the 1920s to the 1930s. The 1939 United States Geological Survey (USGS) topographic map for the Site showed that properties to the east of the Site were bermed marshland (i.e., Station Park Green). The geology, encountered in borings advanced at the Site to approximately 15-feet below ground surface, was unconsolidated clay, silty clay, gravelly clay, silts, sandy clay/silts, clayey sand and sand, which has been characterized as fill material. Investigations on adjacent properties have identified that Bay Mud has been encountered in boreholes below 10-feet deep (CEC, 1992).

## **2.2 HYDROGEOLOGIC SETTING**

The water bearing formations of the San Mateo subbasin are comprised of the Santa Clara Formation of Plio-Pleistocene age and the Quaternary age alluvial deposits. The Quaternary alluvium constitutes the most important water bearing formation and is composed of gravel, sand, silt and clay with various grain size distributions dependent on the depositional environment. Maximum thickness attained by the Quaternary alluvium is approximately 1,250 feet (DWR, 2004).

Groundwater in the area occurs in two separate shallow zones. Shallow perched water occurs at the interface between the fill and the bay mud at an average depth of 6.5-feet below ground surface (CEC, 1992). An approximately one-foot thick discontinuous sand is observed between 10-feet and 13-feet below ground surface. Groundwater flow in the shallow perched zone has been characterized as highly variable due most likely to the variations in the Bay Mud slope (GGTR, 2005). Depth to water in the shallow (up to 12-feet below ground surface) groundwater monitoring wells during February 2022 (MW-1 to MW-9) was reported at 2.92-feet (MW-5) to 6.13-feet (MW-7) below top of casing, with elevations reported at 3.56-feet (MW-7) to 7.61-feet (MW-5) Mean Sea Level (MSL; Table 2-1).

A deeper water-bearing zone occurs beneath the Bay Mud aquiclude. The deeper zone is reported to contain highly saline water. Water in the area has been reported to be influenced by tidal fluctuations and saline (CEC, 1992).

The extent of perched groundwater is also highly variable in the area. Groundwater was not encountered in excavations up to 17-feet deep following excavation activities at the neighboring 1700 South Delaware Street property (Geocon, 2016). While seepage of water was observed into a test pit, it was attributed to “relict storm drain located along west property boundary” at approximately eight-feet below ground surface; it did yield more than 10-gallons and was suspected to have been released from granular storm drain bedding (Geocon, 2016). Similarly, sampling at the former Exxon service station at 1801 S. Delaware Street showed highly variable

perched groundwater flow, which is “most commonly flat with radial-outward flow along the perimeter” due to perching of groundwater in site excavations (ERI, 2009).

## **2.3 SITE HISTORY**

Prior to the 1940s, the Site and surrounding area were marshlands. Beginning in the 1940s, filling of the marshlands began. The Site had a rail spur (1900s to 1960s) that was connected to the Southern Pacific Railroad (currently Union Pacific Railroad) main line located to the southwest and used by the Leslie Salt Refining Company, C.E. Whitney Chemical Company and the L.C. Smith Asphalt Company for transporting bulk materials and refined products. The rail spur was removed in the 1960s for development of the Hayward Park Caltrain station. Highway 92 was also constructed during the 1960s to the south of the Site. The PCJPB purchased the Site in 1992 from the Union Pacific Railroad and continued to operate as a train station.

### **2.3.1 Leslie Salt**

In 1903, C. E. Whitney bought land “east of the railroad tracks in San Mateo and developed a salt-evaporating business.”<sup>1</sup> C. E. Whitney Chemical Company operated a chemical plant on and adjacent to the Site beginning in the early 1900s (Figure 1-2). The Whitney Chemical Company manufactured epsom salts, magnesium chloride and potassium chloride from bay water. The company worked in conjunction with the Leslie Salt Refining Company. Bay water was evaporated in ponds and the salt removed, and the potassium and magnesium salts were obtained from the remaining liquor (CME, 1916).

In 1907, three of the largest salt producers, Shilling, Stauffer Chemical Company and Leslie formed Leslie Salt Company, which consolidated Leslie and Stauffer salt holdings in the west bay under one name. The San Mateo refinery operated until 1941, when the Leslie Salt Company replaced it with a plant at Newark, California (USFW, 2009).

---

<sup>1</sup> [https://www.smdailyjournal.com/news/local/from-leslie-salt-to-cargill/article\\_a256ffbb-fb02-552b-a82b-4c9a17063d0b.html](https://www.smdailyjournal.com/news/local/from-leslie-salt-to-cargill/article_a256ffbb-fb02-552b-a82b-4c9a17063d0b.html)

While Leslie Salt's manufacturing operations near the Site are not well documented, the Newark, California's plant included the production of the leaded fuel additive, 1,2-dibromoethane (ethylene dibromide) from bay water bittern (Regional Water Board, 2015). In addition, 1,2-dibromoethane can be formed naturally in salt water from algae growth (USEPA, 1998).

### **2.3.2 L.C. Smith Asphalt Company**

Between the 1950s and 1960s, the L.C. Smith Asphalt Company operated an asphalt plant on the Site and adjacent Station Park Green Project property located at 1700 South Delaware Street. The 1961 and 1969 Sanborn maps indicate the following asphalt plant features: hot asphalt mixing plant; gravel bunker; four aboveground storage tanks for oil and asphaltic cement; boiler house; dust house; oil heater house; switch house; dust collection bins; tool and welding sheds; equipment repair facilities; storage yards; and a scale house (EDR, 2011). City of San Mateo Fire Department records revealed that three underground storage tanks were installed at the asphalt plant in 1961. These USTs and four additional aboveground tanks for fuel oil and asphalt were demolished by Concar Enterprises in 1973 (Versar, 2014). The 1974 aerial photograph indicates that the Site had been developed as it exists today and the L.C. Smith asphalt Company was no longer present.

## **2.4 SURROUNDING AREAS**

The Site is surrounded by: the Station Park Green Project property located at 1700 South Delaware Street to the east; 470 Concar Drive to the southwest; and the Caltran station located to the west.

### **2.4.1 Station Park Green Project - 1700 South Delaware**

The 11.9-acre Station Park Green Project located at 1700 South Delaware is on the eastern property boundary of the Site. Historical uses of the Site included: L.C. Smith Asphalt Company asphalt plant; sand and gravel operations; former Shell Branded Service Station; former



Montgomery Ward Auto Service Center; and Kmart. Remedial actions, consisting of removing 22,770 tons of soil, were conducted at the Station Park Green Project and redeveloped as a mixed use, multi-family residential development constructed at-grade (GeoCon, 2016). The Station Park Green Project was closed by the SMCEH on September 30, 2016 (SMCEH, 2016).

#### 2.4.1.1 INVESTIGATION AT PROPERTY BOUNDARY WITH 401 CONCAR DRIVE

Nine soil borings were advanced at the western border of the Station Park Green Project and 401 Concar Drive (the Site) by Versar, Inc. (Versar) during March 2014 as part of a Phase II investigation. Laboratory analysis of groundwater samples from the borings revealed the presence of : TPHg up to 19,000 µg/l; TPHd up to 120,000 µg/l; and TPHmo up to 8,700 µg/l in shallow (15-feet to 20-feet below ground surface) groundwater from boring B-12. Laboratory analysis of soil samples collected at 401 Concar Drive revealed: TPHg up to 0.63 mg/kg (B-16 at 2.5 feet below ground surface); TPHd up to 530 mg/kg (B-16 at 2.5 feet below ground surface); and, TPHmo up to 2,200 mg/kg (B-15 at 2.5 feet below ground surface).

Additional Phase II samples collected on November 4, 2014 revealed TPHg in soil samples up to 340 mg/kg; TPHd up to 4,100 mg/kg; and TPHmo up to 30,000 mg/kg as (B-30) at nine-feet below ground surface adjacent to the former asphalt plant.

#### 2.4.2 **470 Concar Drive**

470 Concar Drive, located 150 feet southeast of the Site was historically used for commercial or industrial operations (BAGG, 2000). During 2000, 2008, 2013 and 2014, soil and groundwater samples were collected at 470 Concar Drive and the adjacent 1830 South Delaware Street in preparation for construction of a commercial office building with underground parking. Groundwater samples collected during July and August 2000 by Bay Area Geotechnical Group (BAGG) contained: TPHg up to 250 µg/l; TPHd up to 910 µg/l; and TPHmo up to 1,100 µg/l, although the laboratory noted that the chromatographs were not consistent with typical fuel (BAGG, 2000).

Additional groundwater investigations conducted by Environ in April 2008 revealed: TPHg up to 590 µg/l; TPHd up to 1,400 µg/l; TPHmo up to 1,800 µg/l; 2-butanone up to 230 µg/l; tert butyl alcohol (TBA) up to 3.3 µg/l; 1,2-DCA up to 950 µg/l; methyl tertiary butyl ether (MTBE) up to 77 µg/l; and naphthalene up to 1 µg/l (Environ, 2008). Soil gas samples collected at 470 Concar Drive by Environ in 2008 revealed PCE up to 160 micrograms per cubic meter (µg/m<sup>3</sup>).

### **2.4.3 Vail Burner & Oil Company - 1741 Leslie Street**

Vail Burner & Oil Company operated a bulk oil storage and distribution facility at 1741 Leslie Street, located approximately 75-feet west of the Site, between 1940s and 1989 (GGT, 2006b). The products distributed included: diesel fuel, stove oil, thinners, solvents, kerosene and hydraulic oil (Traverse Group, 1989). An inspection in 1987 by San Mateo County identified that products had been discharged to soil.

Features at 1741 Leslie Street included: two 20,000-gallon aboveground storage tanks (AST) for kerosene and diesel fuel; one 10,000-gallon AST for motor oil; one 420-gallon gasoline underground storage tank (UST); and two 350-gallon heating oil USTs. In 1989, following removal of the ASTs, preliminary assessment investigations were conducted at 1741 Leslie Street. The investigations indicated releases of petroleum hydrocarbons to soil and groundwater. Between 1992 and 1998, the three USTs were removed and additional investigations conducted to delineate the extent of petroleum hydrocarbons in soil and groundwater.

Six monitoring well were installed in 1998 and 1999 and sampled periodically up until 2006. In 2003, additional monitoring wells were installed upgradient and downgradient of 1741 Leslie Street. Laboratory analysis of groundwater samples collected between 2003 and 2013 at downgradient monitoring well MW-8, located upgradient of the Site, revealed: TPHg up to 509 µg/l; TPHd up to 2,100 µg/l; benzene up to 0.8 µg/l; xylenes up to 1.5 µg/l; and MTBE up to 1.1 µg/l (GeoTracker). This site received a no further action letter from the SMCEH on September 22, 2015 (SMCEH, 2015).

## **2.5 SURFACE WATER**

The nearest surface water body is Borel Creek located approximately 0.25 miles southeast of the Site. A lined concrete drainage channel is located approximately 450-feet to the southwest of the Site on the west side of Pacific Boulevard (topographically higher). The closest surface water body located at a lower elevation than the Site is Seal Slough located approximately 4,800-feet to the east-northeast.

## **2.6 SITE USE**

Current Site use is for the Caltrain Hayward Park Station parking. Approximately 95-percent of the Site is paved. The remainder of the Site is comprised of island planters in the parking lot. The reasonably anticipated future use of the Site is for parking and multi-story residential with podium construction and commercial uses on the ground floor. An overlay of the planned multi-story structure is presented on Figure 2-1. Select conceptual Site development plans are included in Appendix A.

### **3.0 SUMMARY OF INVESTIGATIONS**

During May 2016, WEST advanced borings at 24 locations (W-1 to W24) for collection of soil, soil gas and groundwater samples (Figure 3-1). During February 2022, WEST advanced eight borings for soil gas sample collection (W-28 to W-30 and W-32 to W-37) and three borings for soil and groundwater sample collection (W-25, W-26 and W-27). Summaries of the soil, soil gas and groundwater analytical data are presented in Tables 3-1 to 3-5. The sample locations are depicted on Figure 3-1. Details of the investigation are presented below.

#### **3.1 PREVIOUS INVESTIGATIONS**

##### **3.1.1 Soil, Soil Gas and Groundwater Sampling - 2016**

WEST advanced soil borings at 24 locations (W1 to W24) at the Site between May 23, 2016 and May 26, 2016 for collection of soil and groundwater samples. Additional borings were advanced in six of the 24 locations for collection of soil gas samples (W-2, W-5, W-8, W-13, W-16 and W-20).

The borings for soil gas sampling were advanced to 4-feet below ground surface. The borings for soil and groundwater sampling were advanced to approximately two feet below first encountered groundwater measured at approximately 5.5-feet to 14.5-feet below ground surface. The down-hole reusable sampling equipment was decontaminated prior to reuse at each sampling location. Once sampling was complete, the borings were backfilled to the surface with Portland Type II cement grout in accordance with SMCEH permit requirements. The borings were then completed to match the existing ground surface.

###### **3.1.1.1 SOIL SAMPLE RESULTS**

Seventy-six soil samples were analyzed for one or more of the following: TPHg, TPHd and TPHmo range organics by USEPA Method 8015B without silica gel cleanup; volatile organic

compounds (VOCs) by USEPA Method 5035/8260B; semi volatile organic compounds (SVOCs) by USEPA Method 3550/8270C; organochlorine pesticides by USEPA 8081; polychlorinated biphenyls (PCBs) by USEPA 8082; and Title 22 Metals by USEPA Method 6000/7000 series. The 5035A soil sample preparation was conducted by the laboratory.

Laboratory analysis revealed the presence of TPHg up to 181 mg/kg (W-10), TPHd up to 14,700 mg/kg (W-6) and TPHmo up to 11,600 mg/kg (W-6). VOCs were not detected in soil samples above their laboratory reporting limits presented in Table 3-1.

SVOCs were detected in samples from two (W-12, W-14) of the nine soil borings advanced at the Site, including: fluorene up to 8,420 micrograms per kilogram ( $\mu\text{g/kg}$ ; W-14); 2-methylnaphthalene up to 16,100  $\mu\text{g/kg}$  (W-14); naphthalene up to 4,410  $\mu\text{g/kg}$  (W-14); phenanthrene up to 9,330  $\mu\text{g/kg}$  (W-14); and pyrene up to 9,860  $\mu\text{g/kg}$  (W-14; Table 3-2).

Pesticides were not detected in the 45 soil samples analyzed with the exceptions of: chlordane at 20.5  $\mu\text{g/kg}$  and 109  $\mu\text{g/kg}$  in two samples collected at one-foot below ground surface (W-14 and W-20) and dieldrin in one soil sample collected one-foot below ground surface at 7.57  $\mu\text{g/kg}$  (W-14). PCBs were reported at 40.9  $\mu\text{g/kg}$  (W-14) and 89.7  $\mu\text{g/kg}$  (W-13) in two of the of the twenty soil samples analyzed for this parameter (Table 3-2).

Laboratory analysis of 76 soil samples for metals revealed the presence of 11 metals, including: arsenic at less than the laboratory-reporting limit of 2.50 mg/kg to 12.7 mg/kg (W-20 at one-foot below ground surface); and lead at less than the laboratory reporting limit of 2.50 mg/kg to 2,640 mg/kg (W-17 at seven-feet below ground surface; Table 3-3).

A summary of the soil analytical results is included in Tables 3-1 to 3-3 and depicted on Figure 3-2.

### 3.1.1.2 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from 11 of the 24 soil borings using 0.75-inch diameter, five-foot long Schedule 40 PVC slotted casing with a pre-pack #2/16 sand filter placed in the soil borings (at 5- to 15-feet below ground surface). The top of the pre-pack slotted casing was outfitted with 0.75-inch diameter Schedule 40 PVC blank well casing to the ground surface. The temporary screen was left for approximately two-hours to allow groundwater to enter the borings.

Groundwater samples were collected into laboratory supplied containers using a peristaltic pump with disposable polyethylene 0.25-inch diameter tubing. The groundwater samples were submitted to K Prime, Inc., of Santa Rosa, California, a CDPH ELAP certified laboratory, for analysis of: TPHg using USEPA 8015B; TPHd using USEPA 8015B without silica gel cleanup and VOCs using USEPA Method 5035/8260B.

Laboratory analysis of the 11 groundwater samples for chlorinated VOCs revealed the presence of PCE in one groundwater sample at 4.76 µg/l collected from boring W-12. The gasoline additive 1,2-dichlorethane (1,2-DCA) was reported to be present in the sample from boring W-22 at 5,750 µg/l, which was collected from the easternmost boundary with the Station Park Green site, where previous investigations have revealed the presence of gasoline in groundwater. The groundwater sample from boring W-17, located toward the middle of the Site did not reveal the presence of 1,2-DCA above its laboratory-reporting limit of 0.500 µg/l.

The VOC chloromethane (CM) was detected in one groundwater sample from boring W-6, located toward the northern end of the Site at 7.81 µg/l with chloroethane (CA) at 2.65 µg/l. Other chlorinated VOCs were not detected above their respective laboratory-reporting limits.

The petroleum related VOCs detected in groundwater samples (presented in Table 3-4) included: benzene, toluene, ethyl benzene and xylenes in two samples (W-12 and W-14) up to 4.62 µg/l, 1.6 µg/l, 2.29 µg/l and 3.63 µg/l, respectively.

The groundwater sampling revealed the presence of petroleum hydrocarbons in the gasoline range (TPHg) in samples from three of the temporary groundwater wells. The highest detection of TPHg was found in the sampling from W-22 at 256 µg/l, near the locations of the TPHg detections on the Station Park Green site (previously reported up to 190,000 µg/l from boring B12).

Groundwater samples revealed the presence of TPHd up to 11,700 µg/l in the sample collected from boring W-12 and at 8,460 µg/l in the sample from W-14. Lower concentrations of TPHd were reported in samples from borings W-6 (2,950 µg/l), W-9 (838 µg/l), W-15 (1,260 µg/l), W-17 (566 µg/l), W-22 (811 µg/l), W-23 (264 µg/l) and W-24 (570 µg/l). A summary of the groundwater analytical data is presented in Table 3-4.

#### 3.1.1.3 SOIL GAS RESULTS

Six soil gas samples (W-2, W-5, W-8, W-13, W-16 and W-20) were collected from vapor points installed within the soil boring locations depicted on Figure 3-1 in accordance with the California Environmental Protection Agency's, Department of Toxic Substances Control (DTSC) *DTSC Advisory - Active Soil Gas Investigation* (DTSC, 2015).

Laboratory analysis of the soil gas samples revealed the presence of: tetrachloroethene in one sample (W-13) at 10.3 µg/m<sup>3</sup>; benzene up to 9.81 µg/m<sup>3</sup> (W-16); toluene up to 46.5 µg/m<sup>3</sup> (W-8); 1,2,4-trimethylbenzene (1,2,4-TMB) up to 7.23 µg/m<sup>3</sup> (W-5); and 1,3-dichlorobenzene (1,3-DCB) up to 8.66 µg/m<sup>3</sup> (W-16). Other VOCs were not detected above their laboratory reporting limits. A summary of the soil gas analytical data is presented in Table 3-5.

### **3.1.2 Soil and Groundwater Investigations – 2019-2021**

Between December 2019 through February 2021, ERM collected soil samples from 12 soil borings (HPK-SB-01 through HPK-SB-12) and nine groundwater monitoring well borings (MW-1 to MW-9). The soil sampling was conducted to delineate the findings from the 2016 soil

sampling. The soil samples were submitted for analysis of: TPHg, benzene, toluene, ethyl benzene, xylenes, methyl tertiary butyl ether (MTBE) and naphthalene by USEPA Method 8260B; TPHd and TPHmo by USEPA Method 8015B; and semi-volatile organic compounds by USEPA Method 8260C.

Groundwater sampling was attempted at each soil boring location, but due to limited presence or slow infiltration of groundwater, samples were collected from only five of the borings (HPK-HPK-SB-02, HPK-SB-04, HPK-SB-10, HPK-SB-11 and HPK-SB-12). Groundwater samples were submitted for analysis of: TPHg, benzene, toluene, ethyl benzene, xylenes and MTBE by USEPA Method 8260B; TPHd and TPHmo by USEPA Method 8015B.

Groundwater samples were collected from each of the nine groundwater-monitoring wells. The samples were analyzed for TPHg and VOCs by USEPA Method 8260B, and TPHd and TPHmo by USEPA Method 8015B (Table 3-4).

#### 3.1.2.1 SOIL SAMPLE RESULTS

TPH-g was detected in 48 of 53 samples analyzed from the soil borings with concentrations ranging from 0.12 mg/kg in HPK-SB-02 at 13 feet below ground surface to 45 mg/kg in HPK-SB-12 at 5 feet below ground surface. TPH-d was detected in all 53 of the samples analyzed with concentrations ranging from 0.41 mg/kg in HPK-SB-06 at 11 feet below ground surface to 8,200 mg/kg in HPK-SB-07 at 5 feet below ground surface. TPH-mo was detected in 42 of 53 samples analyzed with concentrations ranging from 1.7 J mg/kg in HPK-SB-02 at 9 feet below ground surface to 11,000 mg/kg in HPK-SB-07 at 5 feet below ground surface.

VOC compounds that were detected above the laboratory reporting limit included acetone, methylene chloride, carbon disulfide, 2-butanone, chloroform, benzene, toluene, ethylbenzene, xylenes, and naphthalene. Naphthalene was detected in 12 of the 53 samples analyzed with concentrations ranging from 0.33 µg/kg in sample HPK-SB-12 at 20 feet below ground surface to 1,500 µg/kg in sample HPK-SB-03 at 5 feet below ground surface.



Soil samples from the groundwater monitoring well borings revealed the presence of VOCs including: naphthalene up to 150 µg/kg (MW-5 at 3-feet below ground surface) and 1,2-dibromoethane (also referred to as ethylene dibromide) up to 42,000 µg/kg (MW-9 at 9-feet below ground surface).

SVOC analysis was performed on 14 of the 53 soil samples collected and the results are presented in Table 3-2. In general, soil samples that contained concentrations of TPH were further analyzed for SVOCs. As detailed in Table 3-2, compounds detected above the reporting limit in one or more samples included 2methylnaphthalene, fluorine, phenanthrene, pyrene, and bis(2-ethylhexyl)phthalate.

2-Methylnaphthalene was detected in three of the 14 samples collected with concentrations ranging from 110 J to 4,300 J µg/kg in samples HPK-SB-07 at 5 feet below ground surface and HPK-SB-05 at 0.5 feet below ground surface, respectively.

#### 3.1.2.2 GROUNDWATER ANALYTICAL RESULTS

TPH-d and TPH-mo analysis was performed on four groundwater samples collected from three borings and TPH-g analysis was performed on five groundwater samples from four borings. In addition, nine groundwater-monitoring wells were installed and sampled in February 2021. As shown in Table 3-4, compounds detected above the reporting limit in one or more samples included TPH-g, TPH-d and TPHmo.

TPHg was reported to be present in groundwater samples analyzed by USEPA Method 8260B at up to 46,000 µg/l (MW-9). However, the results do not appear related to TPHg, as there were no detections of petroleum related VOCs in the sample. In addition, as noted above, 1,2-dibromoethane was found in the sample from 9-feet below ground surface in the MW-9 boring. USEPA Method 8260B will result in VOCs that extract at similar times in the chromatographs as TPHg. However, given its presence in soil, the reported TPHg is most likely 1,2-dibromoethane

that eluted during the analysis. TPH-d was detected at concentrations ranging from 360 to 8,600 µg/l.

## **3.2 RECENT INVESTIGATIONS**

During February 2022, WEST conducted the sampling as presented in the *Data Gap Investigation Work Plan*<sup>2</sup> and *Data Gap Investigation Work Plan Addendum*.<sup>3</sup> The sampling included the collection of: 12 soil samples to delineate the extent of 1,2-DBA in soil near monitoring well MW-9; eight soil gas samples to update the previous findings; and groundwater samples from the nine groundwater-monitoring wells and from one boring where soil gas could not be collected (W-33) due to the presence of shallow perched water.

### **3.2.1 Soil Sampling**

WEST advanced three borings for the collection of 12 soil samples for laboratory analysis of VOCs near groundwater monitoring well MW-9 to delineate the extent of 1,2-DBA. The soil samples were collected into continuous core barrels outfitted with disposable acetate liner inserts. Soil samples were collected by cutting approximately six-inch long sections of the acetate liner inserts from the target depth intervals (0.5-, 3-, 6- and 10-feet below ground surface) and capped with Teflon<sup>®</sup> sheets and plastic end caps.

USEPA 5035 sample preparation was conducted at the laboratory within 24-hours of sample collection. The soil samples were labeled, placed in a cooler with ice and transported to a California State Water Resources Control Board (SWRCB) Environmental Laboratory Accreditation Program (ELAP) certified laboratory for chemical analysis of VOCs using USEPA Method 5035/8260B.

---

<sup>2</sup> WEST, *Data Gap Investigation Work Plan, Hayward Park Caltrain Station, Plan, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191*, October 4, 2021,

<sup>3</sup> WEST, *Data Gap Investigation Work Plan Addendum, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMC Co Case #119191/RO2243, GeoTracker ID T10000008604*, January 11, 2022.

### 3.2.1.1 SOIL SAMPLE RESULTS

The VOC 1,2-DBA was not detected above its laboratory-reporting limits ranging from 1.54 µg/kg to 26.2 µg/kg in the 12 soil samples advanced near monitoring well MW-9. The laboratory analysis did reveal the presence of 1,2-DCA up to 613 µg/kg (W-25 at 10-feet); xylenes at 59.9 µg/kg (W-27 at 4-feet); and naphthalene up to 224 µg/kg (W-27 at 4-feet).

### 3.2.2 **Soil Gas Sampling**

WEST advanced nine borings for the collection of eight soil gas samples in the area beneath the proposed future building. The sample locations were placed primarily in areas beneath future occupied areas of the building (e.g., mail room, lobby, etc.). Due to the presence of perched water in boring W-33, soil gas could not be collected from this temporary vapor probe and a groundwater sample was collected from this boring.

#### 3.2.2.1 VAPOR PROBE CONSTRUCTION

Single depth temporary depth vapor probes (W-28 to W-30; and W-32 to W-37) were installed in borings advanced between 2.5-feet and 4.0-feet below ground surface, as perched water was observed at approximately 4.90-feet below ground surface at the proposed vapor probe locations. The vapor probes were installed in accordance with the CalEPA/DTSC's 2015 *Advisory for Active Soil Gas Investigation* ("DTSC Advisory"). Soil borings were advanced using hydraulic direct-push drilling equipment operated by a California-licensed C-57 well drilling contractor. Continuous soil cores were logged and field-screened for total organic vapors using a photo-ionization detector (PID) outfitted with a 10.6 electronic volt (eV) lamp calibrated with 100 parts per million by volume (ppm<sub>v</sub>) isobutylene gas. Boring logs are presented in Appendix C.

Once the boring target depth were reached, the rods were withdrawn and an approximately six-inch thick layer of #3 Monterey filter sand was placed at the base of the borehole. Following filter sand placement, an approximately six-inch long, 0.375-inch diameter screen outfitted with a

length of Teflon® tubing was lowered into the borehole. Additional filter sand was added from the base of the inlet screen to approximately six-inches above the top of the inlet screen. Approximately one-foot of dry bentonite granules was placed above the sand filter pack, followed by two feet of wet bentonite. A gas-tight fitting was used to cap the sampling tube. Following soil gas sampling, the tubing was pulled out of the ground and the annulus sealed with grout.

#### 3.2.2.2 SOIL GAS SAMPLING

Soil gas samples were collected between February 24 and February 25, 2022 pursuant to the *DTSC Advisory* with quantitative leak testing using helium. To allow for equilibration, the vapor samples were collected at least 24-hours following installation. There was no significant rain event, defined as 0.5-inches or greater of rainfall during a 24-hour period, within five days prior to this sampling date.

##### 3.2.2.2.1 Shut-In-Test

Prior to purging or sampling soil gas, a test was conducted to check for leaks in the aboveground fittings, i.e., “shut-in” test. The shut-in test was conducted by evacuating aboveground sampling apparatus, e.g., valves, lines and fittings downstream from the top of the probe, to at least approximately 100-inches of water (7-inches of mercury) using a peristaltic pump. The vacuum was then “shut-in” to the sampling apparatus by closing valves at both ends of the sampling manifold. The vacuum gauge connected to the line via “T”-fitting was observed for at least five minutes and if there was observable loss of vacuum, the fittings were adjusted, as needed, until the vacuum in the aboveground portion of the sampling equipment did not decrease.

##### 3.2.2.3 PURGING

Prior to soil gas sample collection, stagnant air from: the tubing; internal volume of the probe; void space of sand pack around the probe tip; void space of the dry bentonite; and sampling manifold, was purged into a one-liter Tedlar bag. The air was purged through a laboratory-

prepared sampling manifold using a peristaltic pump at a rate of approximately 125 ml/min, i.e., the same rate as during sampling. Pursuant to the *DTSC Advisory*, three purge volumes were removed. Copies of the field data forms are presented in Appendix D.

#### 3.2.2.3.1 Quantitative Leak Testing

During purging and sampling, helium was applied at the well and connections of the sampling equipment including valves, gauges, tubing, manifold and sample container. A shroud was placed over the probe and sampling equipment, then the leak tracer gas, helium, was released into the shroud through the helium addition port. The helium concentration inside the shroud was maintained at approximately 20 percent, by monitoring with a hand-held helium detector and recording the data on field data forms (Appendix C). After a steady helium atmosphere was established inside the shroud, vapor was drawn from the vapor probe and field screened for helium using the handheld helium detector. If helium was detected leaving the sampling apparatus, the fittings were tightened and retested.

Helium measurements of the purged gas were used to evaluate real time leakage into the well and sampling train. Real time leak testing did not reveal helium within the well and sampling train in excess of five-percent of the helium concentration within the shroud, i.e., within acceptable range as indicated in the *DTSC Advisory*.

#### 3.2.2.3.2 Sample Collection

Following purging, the effluent manifold valve was closed and the peristaltic pump turned off. A laboratory-prepared, batch certified one-liter Summa canister containing a vacuum of approximately 30-inches of mercury was then opened to collect the vapor. One duplicate soil sample (022522-4') was also collected concurrently with primary sample (W-28-4') using a sample splitter on a single manifold with 125-ml flow controller located after the flow controller.

During sample collection, the helium within the shroud, vacuum in the sampling probe and vacuum in the Summa canister were recorded every two minutes. Following sample collection,

the flow control valve was closed and the canister atmosphere measured with a pressure gauge and recorded on the field data forms (Appendix C).

Following sample collection, the soil vapor samples were transported to K Prime, Inc., of Santa Rosa, a SWRCB ELAP certified laboratory, following chain-of-custody protocols ASTM D4840. The soil gas samples were analyzed for VOCs using USEPA Method TO15 and carbon dioxide, oxygen and helium by ASTM D-1946. On arrival to the laboratory, Summa vacuums of the soil vapor samples ranged from 3-inches to 16-inches of mercury.

#### 3.2.2.4 SOIL GAS SAMPLE RESULTS

Soil gas sampling revealed petroleum related VOCs in the eight soil gas samples with: benzene up to  $285 \mu\text{g}/\text{m}^3$  (W-28); toluene up to  $335 \mu\text{g}/\text{m}^3$  (W-32); ethyl benzene up to  $138 \mu\text{g}/\text{m}^3$  (W-30); xylenes up to  $214 \mu\text{g}/\text{m}^3$  (W-32); and naphthalene up to  $175 \mu\text{g}/\text{m}^3$  (W-28). Laboratory analytical reports and chain-of-custody forms are presented in Appendix D.

Soil gas sampling revealed the detection of the chlorinated VOC TCE only in sample W-34 at  $103 \mu\text{g}/\text{m}^3$  along with its associated degradation products: cis-1,2-dichloroethene (DCE) at  $44.8 \mu\text{g}/\text{m}^3$ ; trans-1,2-DCE at  $109 \mu\text{g}/\text{m}^3$ ; and chloroethene (also referred to as vinyl chloride) at  $97.3 \mu\text{g}/\text{m}^3$ . Other chlorinated VOCs detected in soil gas sample W-34 included: chloroethane at  $188 \mu\text{g}/\text{m}^3$ ; 1,1-DCE at  $277 \mu\text{g}/\text{m}^3$ ; and 1,2-DCA at  $1,780 \mu\text{g}/\text{m}^3$ .

Soil gas samples collected near W-34 (e.g., W-35 and W-36) did not reveal the presence of TCE, cis-1,2-DCE, trans-1,2-DCE or chloroethene (vinyl chloride) above laboratory-reporting limits. Samples from W-28, and W-35 were reported to contain chloroethane at  $6.65 \mu\text{g}/\text{m}^3$  and  $13.7 \mu\text{g}/\text{m}^3$ , respectively. Chloromethane was only reported to be present in samples from W-28 (up to  $8.55 \mu\text{g}/\text{m}^3$ ). Other chlorinated VOCs were not detected in soil gas samples collected during February 2022 above their respective laboratory reporting limits (Table 3-5).

Oxygen in soil gas ranged from 5.12 percent by volume (W-30) to 21.5 percent by volume (W-35). Carbon dioxide in soil gas ranged from less than a laboratory reporting limit of 0.100 percent by volume (W-30 and W-32) to 4.76 percent by volume (W-34).

### **3.2.3 Depth-Discrete Groundwater Sampling**

Groundwater borings W-25, W-26 and W-27 were advanced near groundwater-monitoring well MW-9 to delineate the extent of 1,2-DBA in groundwater in the area. In addition, due to the presence of groundwater at 2.5-feet below ground surface, a groundwater sample was collected from soil gas boring W-33, rather than a soil gas sample.

The samples from these three borings did not reveal the presence of 1,2-DBA above the laboratory-reporting limits ranging from 0.500 µg/l to 20 µg/l. The samples from boring W-25 revealed the presence of 1,2-DCA at up to 2,740 µg/l. The VOC 1,2-DCA was also reported to be detected in the sample from boring W-26 at 40.8 µg/l with benzene at 2.12 µg/l. Other petroleum related VOCs were also reported to be present in the sample from W-26, including ethyl benzene (1.34 µg/l); 1,2,4-trimethylbenzene (1.66 µg/l); isopropylbenzene (1.94 µg/l) and n-propyl benzene (2.24 µg/l). Laboratory analytical reports and chain-of-custody forms are provided in Appendix D.

The sample from boring W-33 did not reveal the presence of VOCs above the laboratory-reporting limits ranging from 0.500 µg/l to 1.00 µg/l.

### **3.2.4 Groundwater Monitoring Well Sampling**

Groundwater samples were collected from monitoring wells MW-1 to MW-9 using low-flow purge and sample collection techniques (USEPA, 2017). The tubing intake was placed mid-screen, pursuant to USEPA 1997 guidance (SESDPROC-301-R4). New tubing was used for the collection of groundwater samples at each monitoring well. Where wells were purged to dryness,

a minimum of two hours was allowed for the well to return to equilibrium conditions and not sampled less than two hours after the well had recharged.

Groundwater samples were collected into laboratory supplied sample containers for: field measurements of temperature; pH; electrical conductivity; turbidity; and oxidation-reduction potential (ORP); and laboratory analysis. Dissolved oxygen (DO) was collected from a probe inserted to mid-screen of the groundwater monitoring well. In the event that the groundwater wells purged dry or had a drawdown of greater than 0.33-feet, groundwater was sampled in accordance with the USEPA 2017 and CalEPA 2008 guidance. Field data forms are provided in Appendix C.

Following sample collection, the groundwater samples were labeled, placed in a chilled cooler with ice and transported to KPrime Laboratories, Inc. of Santa Rosa, a California SWRCB ELAP certified laboratory, for analysis of TPHg, and TPHd, TPHmo using USEPA 8015M and VOCs using USEPA 8260B following the chain-of-custody procedures outlined in ASTM D 4840.

#### 3.2.4.1 GROUNDWATER MONITORING WELL SAMPLE RESULTS

Laboratory analysis did not reveal the presence of VOCs in groundwater samples above their respective laboratory reporting limits with the exception of samples collected from groundwater monitoring well MW-9. Groundwater samples collected from MW-9 contained: benzene up to 0.540 µg/l; 1,2-DCA up to 5.08 µg/l and 1,2-DBA up to 1.74 µg/l. TPHg, TPHd and TPHmo were detected in groundwater samples collected from MW-9 at 54.90 µg/l, 3,410 µg/l and 766 µg/l, respectively (Table 3-4). Laboratory analytical reports and chain-of-custody forms are provided in Appendix D.



## **4.0 DATA EVALUATION**

Investigations have revealed the presence of: TPHd, SVOCs, lead and pesticides in soil; VOCs in soil gas; and TPH and VOCs in groundwater. To assess the potential risks to human health and the environment associated with the presence of chemicals at the Site, a Conceptual Site Model (CSM) was developed and the data were compared with applicable screening levels

### **4.1 CONCEPTUAL SITE MODEL**

Pursuant to State Water Resources Control Board (SWRCB) guidelines (Executive Order D-5-99 and Senate Bill 989), a CSM has been developed for the Site. The CSM represents the assemblage of the existing Site data and the general physical conditions that influence contaminant transport.

Petroleum hydrocarbons have been detected in soil and groundwater on the Site. There appears to be more than one source of the petroleum hydrocarbons. Relatively heavy petroleum hydrocarbons, i.e., in the diesel range (TPHd) and motor oil range (TPHmo,) have been found in soil up to 14,700 mg/kg and 11,600 mg/kg, respectively (W-6 at 2-feet below ground surface). The occurrence of the heavier hydrocarbons in soil appears related to historical operation of the asphalt plant on and near the Site. Generally, the higher concentrations of heavier hydrocarbons are limited in extent to the areas near boring W-6, W-12 and W-14, with lower concentrations distributed ubiquitously in soil at the Site. The presence of the higher concentrations of TPHd in soil is generally coincident with the higher detections of TPHd in groundwater, e.g., W-6 at 2,950 µg/l; W-12 at 11,700 µg/l and W-14 at 8,460 µg/l. However, these groundwater samples were collected from borings and contained suspended solids, which biased concentrations higher than those found in subsequently installed monitoring wells.

The higher concentrations of petroleum hydrocarbons in the gasoline range (TPHg) are present primarily in samples collected on the Station Park Green project located to the east, e.g., 190,000 µg/l in the sample from B12. Lower concentrations of TPHg were found in samples collected on

the Site with the highest detection being reported in the sample from boring W-22 (located near B12) at 256 µg/l. The reported TPHg at 42,000 µg/l in the sample from MW-9 is most likely due to the presence of 1,2-dibromoethane. 1,2-Dibromoethane has not been reported to be present in other samples above the laboratory-reporting limit.

#### **4.1.1 Nature of Site Groundwater**

The monitoring wells MW-1 to MW-9 (up to 12-feet below ground surface) appear to be screened in a perched groundwater zone that is neither a potential potable water source nor connected hydraulically to surface water. As explained further below, the perched groundwater beneath the Site does not appear to represent a potential potable water source. In addition, the perched groundwater appears neither hydraulically connected on-Site nor potentially migrating to surface water.

##### **4.1.1.1 GROUNDWATER IS NON-POTABLE WATER SOURCE**

A well yield test conducted on groundwater monitoring well MW-9 revealed a yield of approximately 90-gallons per day. In addition, conductivity measurements of water within the monitoring wells installed on the Site have been measured up to 58.3 milliSiemens per centimeter (mS/cm), e.g., MW-1 up to 15.4 mS/cm, MW-4 up to 5.49 mS/cm, MW-5 up to 12.7 mS/cm, MW-6 up to 38.3 mS/cm, MW-7 up to 58.3 mS/cm; and MW-9 up to 6.57 mS/cm. Pursuant to SWRCB No. 88-63, the water bearing geologic unit is not considered suitable, or potentially suitable, for municipal or domestic water supply, as: a single well is not capable of producing an average, sustained yield of 200-gallons per day; and the electrical conductivity has been measured above 5.0 mS/cm.

#### 4.1.1.2 PERCHED GROUNDWATER WITH NO DISCHARGE TO SURFACE WATER

There are multiple lines-of-evidence demonstrating the lack of hydraulic interconnection of the perched water zone or connection to surface water. These lines-of-evidence include: (1) topographic setting; (2) variability of dissolved solids concentrations; (3) lower groundwater elevations in wells located upgradient of the Site; (4) inconsistent groundwater elevations measured in Site monitoring wells; (5) the lack of groundwater in the upper 17-feet at the downgradient property; and (6) findings at other nearby sites.

##### 4.1.1.2.1 Site Topographic Setting

The Site is located within historical bay marshland (Figure 1-2), which has been subsequently filled with imported soil and debris. In the upper approximate three-feet, debris from historical site activities is present, including brick, concrete fragments, wood rail ties and marshland materials (ERM, 2020). Subsequent filling has moved the San Francisco Bay margin approximately 1.5-miles to the northeast. Prior to filling of the bay marshland, surface flow at the Site was likely tidally influenced. After placement of the fill, the previously present surface water was trapped as perched water within the undulating marshland bay mud.

##### 4.1.1.2.2 Electrical Conductivity Variation

The presence of the relatively elevated conductivity in samples from Site monitoring wells is consistent with the trapped brackish surface water. While measurements have revealed electrical conductivity up to 58.3 mS/cm in some wells, water in wells MW-2, MW-3 and MW-8 was characterized with lower conductivity, i.e., less than 3 mS/cm. The lower conductivity found in water from wells MW-2, MW-3 and MW-8 is consistent with the lack of hydraulic connection of the water found at the Site, as these wells are co-located within 30-feet of wells with conductivity greater than 30 mS/cm (e.g., MW-6). The lower conductivity water within wells MW-2, MW-3 and MW-8 most likely represents perched infiltrated water.

If there was hydraulic interconnection of the groundwater in Site monitoring wells, the electrical conductivity of the water within the same area of the Site would have similar readings. However, the monitoring has revealed variations of at least one order of magnitude in electrical conductivity, which confirms that the perched groundwater is not moving even within localized areas of the Site, e.g., MW-6 with conductivity of 48.6 mS/cm and MW-7 with conductivity of 4.38 mS/cm. Therefore, due to the lack of hydraulic interconnection in the perched water zone, there is neither flow of groundwater between wells nor toward surface water bodies.

#### 4.1.1.2.3 Groundwater Elevations

Groundwater monitoring conducted at the upgradient property at 1741 Leslie Street (SMCo #110049) revealed groundwater flow directions consistently to the east to northeast toward San Francisco Bay. However, in contrast, groundwater elevations within Site monitoring wells are highly variable. Monitoring wells on the eastern portion of the Site closer to San Francisco Bay have had higher groundwater elevations than those wells located to the west. For example, groundwater elevations in monitoring well MW-4 on the west side of the Site was measured at 4.47-feet MSL and in monitoring well MW-5 located to the east the elevation was measured at 6.73-feet MSL. Similarly, relatively co-located groundwater monitoring wells have elevations varying by more than 3.5-feet, e.g., MW-6 with a measured groundwater elevation of 2.72-feet MSL is located approximately 70-feet from MW-8 with a measured groundwater elevation of 6.3-feet MSL. To the extent that groundwater was hydraulically interconnected in the shallow perched-zone, more uniform and consistent groundwater elevations should be observed.

#### 4.1.1.2.4 Lack of Groundwater at 1700 Delaware Street

Another line-of-evidence regarding the lack of advective groundwater movement in the perched groundwater at the Site is the lack of water encountered in excavations up to 17-feet deep at the neighboring 1700 South Delaware Street property (Geocon, 2016). While seepage of water was observed into a test pit at 1700 South Delaware Street, it was attributed to “relict storm drain located along west property boundary” at approximately eight-feet below ground surface that did not yield more than 10-gallons and was suspected to have been released from granular storm

drain bedding (Geocon, 2016). The absence of groundwater in the area between the Site and San Francisco Bay provides another line-of-evidence that the perched pockets of groundwater at the Site are not discharging to surface water.

#### 4.1.1.2.5 Lack of Surface Water Discharge at 1801 South Delaware Street

Investigations at the former Exxon Service Station 74135, located approximately 750-feet northeast of the Site confirmed “advective groundwater flow from the site is not a completed pathway” (ERI, 2009). Further, using groundwater elevations and estimated hydraulic conductivities, it was calculated that “dissolved-phase hydrocarbons released to groundwater beneath the subject site would reach the 16th Street canal in approximately 5,645 years and the unnamed canal to the south in 8,065 years....Based on this evaluation, the aquatic habitat protection pathway is incomplete” (ERI, 2009). The GPP reviewed the findings of investigations and remediation at 1801 South Delaware Street as part of its closure evaluation and concluded that localized affected groundwater “will not likely migrate to surface water body that receives the storm drain effluent” (GPP, 2011). Given the similarities in lithology, these findings should apply to the Site groundwater.

## 4.2 SCREENING LEVEL ASSESSMENT

A screening level assessment was prepared to evaluate the adequacy of the investigations and identify chemicals of potential concern (COPC). The screening level assessment consisted of a comparative analysis between the maximum concentrations of detected chemicals and the potentially applicable California Regional Water Quality Control Board – San Francisco Bay Region (Regional Water Board) Environmental Screening Levels (ESLs). While exceeding an ESL does not necessarily indicate a threat to human health and/or environment, “it is unlikely the presence of a chemical in soil, soil gas or groundwater below the corresponding ESL will pose a significant threat to human health, water resources or the environment.” Exceeding an ESL indicates that “additional evaluation is warranted.” Therefore, if chemicals were not found above

their applicable Tier 1 ESLs, they were not retained for further evaluation, i.e., chemicals of concern (COCs) were selected based on their presence above their Tier 1 ESLs.

The subject chemicals present above Tier 1 ESLs include: TPHg, TPHd, TPHmo, 1,2-DCA, 1,2-DBA, naphthalene, anthracene, benzo(a)anthracene, chrysene, fluorene, 2-methyl naphthalene, chlordane, dieldrin, cobalt and lead and in soil; and TPHg and TPHd in groundwater. TCE, chloroethene, 1,2-DCA, benzene and naphthalene were found present in soil gas above Tier 1 ESLs.

Arsenic and vanadium were found in soil above their Tier 1 ESLs, but at concentrations consistent with ambient geological materials in the Bay Area. A summary of the chemicals with concentrations above Tier 1 ESLs is presented in Tables 3-1 to 3-5. Where chemicals were present above their Tier 1 ESLs, a Tier 2 analysis was performed to develop Site-specific screening levels.

#### **4.2.1 Current and Future Potential Exposure Pathways**

The Site is currently used as a parking lot for Caltrain riders and users of the Hayward Park Station. Following the planned Site development, the primary use of the Site will remain automobile and bicycle parking. The first floor of the proposed multi-family residential structure is mostly parking, with a leasing office, gym, lounge and trash room. The development does not include any common areas for gardening or other potential soil contact use. In addition, the only vegetation will be limited to planter boxes. Therefore, consistent with current use, there will be no complete exposure pathway to soil or habitat for potential sensitive ecological receptors. As discussed above, exposure to perched groundwater is limited to potential nuisance conditions as it is neither a potential potable water source or does groundwater pose a threat to surface water receptors. Soil vapor migration to indoor air is a potential exposure pathway.

Site-specific ESLs were selected by refining the CSM to identify relevant and potentially complete exposure pathways and receptors. Figure 4-1 summarizes the exposure pathway and receptor evaluation presented below.

## **4.2.2 Tier 2 ESL Soil Screening Levels**

### **4.2.2.1 SOIL HUMAN EXPOSURE ESLs**

While the future use does include high density residential, given the lack of potential for direct contact with soil and lack of residents on the groundwater floor, the Tier 2 analysis is based on commercial/industrial exposure scenario. The Tier 2 ESLs for commercial/industrial human exposure are predicated on the conservative assumption that on-Site occupants spend all or most of their day outdoors. The exposure is presumed to include: a full time property occupant who spends most of their day conducting manual labor activities outdoors, or performs regular landscape maintenance with soil contact in the upper two-feet (Regional Board, 2008). The scenario includes exposure for: eight hours per day, 250-days per year for 25-years. Therefore, given the current and planned future use, the assumptions in the commercial exposure ESLs are conservatively protective (ESLs – Table S-1).

### **4.2.2.2 SOIL TERRESTRIAL HABITAT ESLs**

Given the lack of vegetated area and the nature of the Site use for train parking and multi-family residential, there will be no habitat for complete exposure pathways to potentially sensitive ecological receptors. Therefore, the ESLs from Table S-2 are not applicable to the Site.

### **4.2.2.3 SOIL LEACHING TO GROUNDWATER**

As noted above, the TDS of the groundwater in the areas is above SWRCB 88-63 for criteria for potable water of 3,000 mg/l. Therefore, leaching to groundwater protection soil ESLs should be based on non-drinking water resource protection (ESL Table S-3). However, given the lack of

movement in the perched groundwater at the Site, the groundwater protection criteria for discharge to surface water do not apply to this Site.

#### 4.2.2.4 SOIL GROSS CONTAMINATION LEVELS

The gross contamination ESL was developed to assist in identifying the potential presence of non-aqueous phase liquid (NAPL) or free product. The concentrations for most chemicals were developed using the Massachusetts Department of Environmental Protection (MADEP) methodology. However, the MADEP methodology underestimates the gross contamination level. Therefore, the ESLs were developed using the results from the Brost and Duvall studies presented in the American Petroleum Institute's Soil & Groundwater Research Bulletin No. 9 (Brost and Duvall, 2000).

The Regional Water Board conservatively selected the Tier 1 gross contamination soil concentrations for coarse gravel, which were reported at 1,000 mg/kg and 2,286 mg/kg (rounded to 2,300 mg/kg in the ESL tables). However, as soil at the Site does not contain coarse gravel, the gross contamination levels for coarse-grained sand were used in the Tier 2 analysis, which is more consistent with the lithology observed at the Site.

#### 4.2.2.5 SOIL ODOR NUISANCE LEVELS

Per the ESL Manual, the odor nuisance level is a function of the vapor pressure of the chemical and the odor threshold. Table 11-2 of the ESL User Manual presents two criteria for each scenario, based on vapor pressure and odor index. For a heavily aged diesel, where the remaining fraction of TPH is mainly in the heavy motor oil range with very low vapor pressure (e.g., laboratory notes "heavier hydrocarbons contributing to the diesel range quantitation"), there is much less odor.

The odor from degraded TPH has been reported to decrease by approximately 10 times relative to fresh TPH (Zemo and Foote, 2003). Therefore, to the extent that the TPH results are due to



heavier hydrocarbons (aged), use of the motor oil criteria, i.e., non-odorous, appears appropriate, except where odors were actually noted during drilling. However, as a conservative approach the default odor/nuisance levels for commercial exposure were selected as the screening levels for the upper two-feet of soil.

#### 4.2.2.6 SUMMARY OF TIER 2 SOIL SCREENING LEVELS

Based on the preceding analysis, soil screening levels for the upper two-feet were selected based on the lowest of: (1) direct exposure (commercial exposure); (2) gross contamination (S-4 as modified for coarse sand for TPH); and (3) odor nuisance levels (S-5). The Tier 2 soil screening levels for soil deeper than two-feet were selected based on the gross contamination protection (modified for coarse sand for TPH). If no chemical concentrations were present above the lowest value of the identified ESLs, then a further evaluation was deemed unnecessary, e.g., chlordane. The selected soil Tier 2 screening levels are summarized in Tables 3-1 to 3-3.

##### 4.2.2.6.1 TPH Soil Screening Levels

Using coarse-grained sand to evaluate potential NAPL, the gross contamination levels for the petroleum hydrocarbons are 3,000 mg/kg for TPHg, TPHd at 8,000 mg/kg and TPHmo at 17,000 mg/kg (Duvall and Brost, 2000). The occurrence of separate phase was noted in soil samples at the Site where TPHd concentrations were greater than 8,000 mg/kg, which provides another line of evidence for the use of the coarse sand gross contamination concentrations. For soil in the upper two feet, the odor nuisance ESLs for commercial exposure were used for TPHg and TPHd at 500 mg/kg and 1,000 mg/kg, respectively.

##### 4.2.2.6.2 VOC Soil Screening Levels

Three VOCs are present in soil above their Tier 1 ESLs: naphthalene (up to 1,500 µg/kg); 1,2-dichloroethane (up to 990 µg/kg) and 1,2-dibromoethane (up to 14,000 µg/kg). However, these chemicals were not present above the human health or odor nuisance level in the upper two feet or above the gross contamination level for soil deeper than two-feet.

#### 4.2.2.6.3 PAH Screening Levels

The PAHs fluoranthene (up to 2,910 µg/kg); fluorene (up to 8,420 µg/kg); and 2-methylnaphthalene (up to 16,100 µg/kg) are present above their Tier 1 ESLs. Based on the evaluations discussed above and summarized in Table 3-2, the screening levels for anthracene and chrysene are 4,100 µg/kg and 2,200 µg/kg, respectively.

#### 4.2.2.6.4 Metal Screening Levels

Based on the anticipated future use and evaluations presented above and summarized in Table 3-3, no metals are present at levels above potential screening levels.

### 4.2.3 Tier 2 Soil Gas Analysis

As approximately 80-percent of the ground floor of the proposed building will be open-air ventilated garage, Site-specific screening levels were developed for future garage visitors. The Site-specific screening levels were calculated using adjustments to the exposure factors for the commercial ESLs. Rather than the default 8-hour exposure for commercial exposure, the 95th percentile exposure time of 1-hour per day was used in lieu of the default 8-hour per day for garage visitors (USEPA, 2011). Adjusting for the 1-hour exposure, the garage visitor indoor air screening levels were calculated at eight-times higher threshold than the Tier 1 ESL for commercial exposure.

Using the garage indoor air screening level and the very conservative soil gas to indoor attenuation factor (AF) of 0.03, Tier 2 soil gas concentrations were calculated for garage visitors. However, the 0.03 AF does not incorporate the higher ventilation rate present within the garage. To address potential carbon monoxide accumulation in the garage, the California Mechanical Code (Section 402) requires at least 0.75 cubic feet per minute per square foot (cfm/sf) or for the Site garage, approximately 4.5 air changes per hour (ACH), which is approximately nine times higher than the default 0.5 ACH for residential and commercial structures. Therefore, the Tier 2 garage visitor screening level is very conservative. For the occupied enclosed portions of the first

floor of the building, Tier 1 commercial screening levels were used in the evaluation of Site conditions.

#### 4.2.3.1 LOW-THREAT CLOSURE POLICY CRITERIA – PETROLEUM HYDROCARBONS

The State Water Resources Control Board (SWRCB) has developed its Low-Threat Closure Policy (LTCP; SWRCB, 2012) to establish low-threat petroleum site closure criteria. In the absence of site-specific conditions that demonstrably increase the risk associated with residual petroleum constituents, cases that meet the general and media-specific criteria identified in the SWRCB policy “do not pose a threat to human health, safety or the environment and are appropriate for UST case closure pursuant to Health and Safety Code Section 25296.10.

The LTCP threshold criteria include media specific criteria for petroleum related VOCs in soil gas, including benzene and naphthalene. The LTCP criteria for soil gas consider whether a bioattenuation zone exists. The SWRCB has concluded, “potential human exposures to vapors are mitigated by bioattenuation processes as vapors migrate toward the ground surface, i.e., an area of soil with conditions that support biodegradation of petroleum hydrocarbon vapors. For benzene the LTCP soil gas criteria include  $280 \mu\text{g}/\text{m}^3$  for no bioattenuation zone and  $280,000 \mu\text{g}/\text{m}^3$  for sites with a bioattenuation zone. The naphthalene LTCP criteria are:  $310 \mu\text{g}/\text{m}^3$  and  $310,000 \mu\text{g}/\text{m}^3$  for sites without and with bioattenuations zones, respectively.

#### 4.2.4 **Tier 2 Groundwater Screening Levels**

The Tier 1 ESLs are based on the use of groundwater as a potable water source. Total dissolved solids (TDS) expressed as specific conductance in groundwater at the Site exceeds the criteria established in State Water Resources Control Board Resolution 88-63 for designation as a potable water source. Therefore, where chemicals are present above Tier 1 ESLs, Tier 2 screening levels were developed based on non-drinking water resource criteria.

As there is no potential discharge of groundwater from the Site to surface water, the screening levels for VOCs in groundwater were developed based on protection from vapor intrusion for commercial workers in the future building, i.e., benzene at 1.8 µg/l, PCE at 2.8 µg/l; and 1,2-DCA at 9.8 µg/l.

The only groundwater monitoring wells samples with benzene, PCE, and 1,2-DCA were collected from well MW-9, which is located beneath the future at-grade lobby area (Figure 3-1). Given the anticipated limited exposure time within the lobby and the anticipated measures to address soil contamination in the area, measures to address vapor intrusion should be considered as a contingency.

Given the limited extent of TPH in groundwater and the proposed remedial goals for soil to address potential gross contamination, no screening levels are proposed for TPHg or TPHd in groundwater. There were no detections of TPHg above its gross contamination level of 50,000 µg/l and only one sample of TPHd in a sample from monitoring wells above its gross contamination level of 2,500 µg/l (MW-9).

#### **4.2.5 Background Concentrations**

Measurable concentrations of metals, including arsenic, may represent background concentrations associated with natural and anthropogenic sources. The CalEPA advises that naturally occurring arsenic in soil is frequently higher than the risk-based concentration set at a one-in-one-million cancer risk (the residential ESL for arsenic in soil is 0.067 mg/kg). The CalEPA has usually required cleanup to background when chemicals are present that are due to anthropogenic sources. Background arsenic in the San Francisco Bay Region has been estimated at up to 11 mg/kg (Duverge, 2011).

### **4.3 COMPARATIVE ANALYSIS**

The concentrations of VOCs have been compared to the identified screening criteria to assist in identifying areas needing additional evaluation or the need for immediate response actions. The soil, soil gas and groundwater screening Tier 1 ESLs are presented in Tables 3-1 to 3-5.

#### **4.3.1 Soil Conditions**

##### **4.3.1.1 PETROLEUM HYDROCARBONS**

The concentration of TPHg in soil samples was reported up to 181 mg/kg (W-10 collected at 3-feet below ground surface); above its Tier 1 ESL of 100 mg/kg for protection of groundwater and its gross contamination ESL of 100 mg/kg (Table 3-1), but below applicable Tier 2 screening levels for direct exposure at 2,000 mg/kg, gross contamination at 1,000 mg/kg and odor/nuisance at 500 mg/kg.

TPHd in soil was reported: above the Tier 1 ESL of 260 mg/kg in 18 (298 mg/kg to 14,700 mg/kg) of the 58 soil samples analyzed; and above the gross contamination ESL of 1,000 mg/kg in 13 of the 58 soil samples (1,800 mg/kg to 14,700 mg/kg), with the highest concentrations reported in soil samples collected from borings W-6, W-12 and W-14 (Table 3-1).

##### **4.3.1.2 VOCs**

VOCs in soil were not detected above their respective Tier 1 ESLs, with the exception of 1,2-dibromoethane, which was reported to be present at 14,000 µg/kg, above its Tier 1 ESL of 7 µg/kg, but below applicable Tier 2 screening levels, e.g., for direct exposure in the upper two-feet and gross contamination level. Naphthalene was also found up to 1,500 µg/kg in soil above its Tier 1 ESL of 42 µg/kg, but below applicable Tier 2 screening levels (Table 3-1).

#### 4.3.1.3 PAHs

PAHs were detected in soil samples from two (W-12, W-14) of the nine soil borings advanced at the Site (W-12 to W-20), including: fluorene up to 8,420 µg/kg; (W-14) above its Tier 1 ESL of 6,000 µg/kg; 2-methylnaphthalene up to 16,100 µg/kg (W-14) above its Tier 1 ESL of 880 µg/kg; naphthalene up to 4,410 µg/kg (W-14) above its Tier 1 ESL of 42 µg/kg; and phenanthrene up to 9,330 µg/kg (W-14). Pyrene in soil was detected up to 9,860 µg/kg (W-14), which is below its Tier 1 ESL of 45,000 µg/kg (Table 3-2). No PAHs were detected above their applicable Tier 2 screening levels (Table 3-2).

#### 4.3.1.4 PESTICIDES

The pesticide chlordane was reported at less than the laboratory reporting limit of 12.5 µg/kg to 125 µg/kg, with the exception of three samples collected at one-foot below ground surface (14.8 µg/kg at W-11, 20.5 µg/kg at W-14 and W-20 at 109 µg/kg); above its Tier 1 ESL of 8.5 µg/kg, but below applicable Tier 2 screening levels (Table 3-2). One soil sample collected at one-foot below ground surface and analyzed for dieldrin was reported at above its laboratory-reporting limit of 5 µg/kg to 50 µg/kg (W-14 at 7.57 µg/kg), which is above its Tier 1 ESL of 0.46 µg/kg, but below its applicable Tier 2 screening level of 160 µg/kg. PCBs were detected in soil up to 89.7 µg/kg (W-13), which is below its Tier 1 ESL of 230 µg/kg (Table 3-2).

#### 4.3.1.5 METALS

Arsenic was reported in soil samples at less than the laboratory-reporting limit of 2.50 mg/kg to 12.7 mg/kg, which is consistent with background for the San Francisco Bay area. Nine of these 46 soil samples were reported to contain lead above the Tier 1 ESL of 32 mg/kg for protection of ecological receptors, with the highest lead in soil reported in sample W-17 collected at seven-feet below ground surface (2,640 mg/kg). Only four of the 85-soil samples were reported to contain lead above the residential exposure Tier 1 ESL of 80 mg/kg and two soil samples were reported to contain lead above its commercial exposure ESL of 320 mg/kg (W-17). However, lead was not

detected above its commercial exposure ESL in the upper two-feet, the zone of potential exposure.

Cobalt was reported above the Tier 1 ESL of 23 mg/kg in two of 16 soil samples analyzed for this parameter (W-4 at 32.3 mg/kg and W-18 at 30.4 mg/kg, both collected at 10-feet below ground surface). However, cobalt was not detected above its Tier 2 screening level for protection of commercial workers. All of the 16 soil samples analyzed for vanadium were above its Tier 1 ESL of 18 mg/kg for protection of terrestrial habitat but below its residential ESL of 390 mg/kg.

#### **4.3.2 Soil Gas Conditions**

PCE in six soil gas samples collected in 2016 from 3-feet to 3.5-feet below ground surface was reported at less than the laboratory reporting limit of  $6.78 \mu\text{g}/\text{m}^3$ , with the exception of  $10.3 \mu\text{g}/\text{m}^3$  in sample W-13. PCE in soil gas at  $10.3 \mu\text{g}/\text{m}^3$  is below its Tier 1 ESL for protection of indoor air of  $15 \mu\text{g}/\text{m}^3$ . The 2022 soil gas sampling did not reveal the presence of PCE above its laboratory-reporting limit of  $6.78 \mu\text{g}/\text{m}^3$ .

TCE, while not detected in 2016, was detected in one sample collected in 2022 from boring location W-34 at  $103 \mu\text{g}/\text{m}^3$ , approximately equal to its Tier 1 commercial vapor intrusion ESL. Co-present in the sample from boring W-34 was the PCE and TCE degradation product cis-1,2-DCE at  $44.8 \mu\text{g}/\text{m}^3$ , less than its commercial ESL of  $1,200 \mu\text{g}/\text{m}^3$ . The degradation product chloroethene was also found in the soil gas sample from W-34 (but not from other locations) at  $97.3 \mu\text{g}/\text{m}^3$ , which is above its commercial ESL of  $5.2 \mu\text{g}/\text{m}^3$ . The chlorinated VOC 1,2-DCA was also found in the sample from W-34 at  $1,780 \mu\text{g}/\text{m}^3$ , above its ESLs for protection of indoor air under a commercial scenario of  $16 \mu\text{g}/\text{m}^3$ .

##### **4.3.2.1 PETROLEUM-RELATED VOCs**

The petroleum related VOCs, benzene and naphthalene, were not found in 2016 above their respective commercial ESLs. However, benzene was found in 2022 at approximately equal to its

LTCP soil gas criteria for sites without a bioattenuation zone of  $280 \mu\text{g}/\text{m}^3$  in the samples from W-28 ( $285 \mu\text{g}/\text{m}^3$ ) beneath the future bicycle storage room. Nearby soil gas sample W-29 did not reveal the presence of benzene above its LTCP criteria in the area beneath the lobby. Neither naphthalene nor ethyl benzene were reported to be present in soil gas above their respective LTCP soil gas criteria for sites without a bioattenuation zone (Table 3-5).

### **4.3.3 Groundwater Conditions**

A summary of the groundwater conditions relative to their respective screening levels is presented below.

#### **4.3.3.1 PETROLEUM HYDROCARBONS**

TPHg was detected in groundwater above its laboratory-reporting limit of  $50 \mu\text{g}/\text{l}$  in four of eleven depth discrete samples collected in 2016 (W-14 at  $185 \mu\text{g}/\text{l}$ , W-12 at  $198 \mu\text{g}/\text{l}$  and W-22 at  $256 \mu\text{g}/\text{l}$ ); above its Tier 1 ESL of  $100 \mu\text{g}/\text{l}$ ; but below the Tier 2 screening level of  $400 \mu\text{g}/\text{l}$  for protection on non-drinking water resources. Samples collected in 2020 did not reveal TPHg above its Tier 1 screening level of  $100 \mu\text{g}/\text{l}$ . During the 2022 groundwater-monitoring event, TPHg was only detected in the groundwater samples from MW-9 at up to  $54.90 \mu\text{g}/\text{l}$ , less than the Tier 1 ESL of  $100 \mu\text{g}/\text{l}$ .

Samples collected in 2016 for TPHd in groundwater ranged from  $325 \mu\text{g}/\text{l}$  to  $11,700 \mu\text{g}/\text{l}$  (W-12); above its Tier 1 ESL of  $100 \mu\text{g}/\text{l}$  with some samples exceeding the Tier 2 gross contamination screening level of  $2,500 \mu\text{g}/\text{l}$ . Samples from groundwater monitoring wells in 2022 revealed TPHg up to  $3,410 \mu\text{g}/\text{l}$ , above its gross contamination level, but below its odor nuisance level of  $5,000 \mu\text{g}/\text{l}$ . Samples from the other eight monitoring wells (MW-1 to MW-8) collected in 2022 revealed TPHd ranging from  $434 \mu\text{g}/\text{l}$  to  $3,320 \mu\text{g}/\text{l}$ , generally below or near its gross contamination ESL.



#### 4.3.3.2 VOCs

##### 4.3.3.2.1 Chlorinated VOCs

The chlorinated VOC, 1,2-DCA, was detected above its laboratory-reporting limit of 0.500 µg/l in two of 11 samples collected in 2016, i.e., W-23 at 2.89 µg/l, below its Tier 1 ESL of 50 µg/l and 5,750 µg/l at W-22, above its Tier 1 ESL of 50 µg/l, but below the Tier 2 screening level for protection of non-drinking water. Subsequent sampling in 2021<sup>4</sup> and 2022 has revealed the presence of 1,2-DCA only in samples from groundwater monitoring well MW-9 ranging from 54 µg/l (May 2021) to 5.21 µg/l (February 2022), with the most recent sample concentration being lower than the vapor intrusion groundwater ESL of 9.8 µg/l.

The chlorinated VOC, 1,2-DBA was reported to be present in the May 2021 sample only from groundwater monitoring well MW-9 at up to 360 µg/l, above its groundwater vapor intrusion ESL of 0.76 µg/l. Sampling of MW-9 in February 2022 revealed 1,2-DBA at up to 1.74 µg/l, which is also above its vapor intrusion ESL of 0.76 µg/l.

Chloroethene was only detected in samples from groundwater monitoring well MW-9 in May 2021, but was not reported to be present above its laboratory-reporting limit of 0.5 µg/l during the 2022 sampling event.

##### 4.3.3.2.2 Petroleum Related VOCs

The petroleum related VOCs, benzene and naphthalene, were detected in samples from 2016 above their laboratory-reporting limits of 0.500 µg/l and 1.00 µg/l, respectively, in two samples (W-12 and W-14), above their Tier 1 ESLs, but below applicable Tier 2 screening levels for protection on non-drinking water resources. Benzene in groundwater was detected at 2.69 µg/l (W-12) and 4.62 µg/l (W-14); above its Tier 1 ESL of 0.42 µg/l, but below its Tier 2 screening level for protection of non-drinking water resources of 46 µg/l. Naphthalene was detected at 9.87

µg/l (W-12) and 23.5 µg/l (W-14); above its Tier 1 ESL of 0.17 µg/l, but below its Tier 2 screening level for protection of non-drinking water resources of 24.9 µg/l.

Samples from groundwater monitoring wells collected in 2021 and 2022 have revealed only petroleum related VOC of benzene in samples from MW-9. While benzene was reported at up to 1.3 µg/l in May 2021, the February 2022 sample revealed benzene at up to 0.540 µg/l, which is less than its groundwater vapor intrusion ESL of 1.0 µg/l. Other petroleum related VOCs were not detected above their respective ESLs (Table 3-4).

#### **4.3.4 Data Gap Analysis**

The data evaluation adequately explains the distribution of chemicals at the Site. The data gap investigation data revealed that while 1,2-DBA had been found in soil samples collected from the MW-9 boring, delineation samples did not reveal its presence above the laboratory-reporting limits.

The soil gas sampling also confirmed that there was seasonal/temporal variation of concentrations, and that petroleum related VOCs appear to be distributed across the Site and chlorinated VOCs were limited to the area near monitoring well MW-9. The follow up groundwater sampling also confirmed that while present, concentrations of petroleum hydrocarbons and VOCs were generally lower than previously reported. Based on these findings, no data gaps have been identified.

#### **4.3.5 Soil Remedial Goals**

Based on the preceding analysis, soil remedial goals for the upper two-feet were selected based on the lowest of: 1) direct exposure (commercial exposure); 2) gross contamination (S-4 as modified for coarse sand for TPH); and 3) odor nuisance levels (S-5). The soil remedial goals for

---

<sup>4</sup> While samples were collected from wells in February 2021, the results of 1,2-DCA and 1,2-DBA appeared biased high based on subsequent sampling, and hence are not considered reliable.

soil deeper than two-feet were selected based on the gross contamination protection (modified for coarse sand for TPH). If no chemical concentrations were present above the lowest value of the identified ESLs, then a remedial goal was deemed not necessary, e.g., chlordane. The selected soil remedial goals are summarized in Tables 3-1 to 3-3.

#### 4.3.5.1 TPH SOIL REMEDIAL GOALS

Using coarse-grained soil to evaluate potential NAPL, the gross contamination levels for the petroleum hydrocarbons are 3,000 mg/kg for TPHg, TPHd at 8,000 mg/kg and TPHmo at 17,000 mg/kg (Duvall and Brost, 2000). The occurrence of separate phase was noted in soil samples at the Site where concentrations were greater than 8,000 mg/kg, which provides another line of evidence for the use of the coarse sand gross contamination concentrations. For soil in the upper two feet, the odor nuisance ESLs for commercial exposure were used for TPHg and TPHd at 500 mg/kg and 1,000 mg/kg, respectively.

#### 4.3.5.2 VOC SOIL REMEDIAL GOALS

Three VOCs are present in soil above their Tier 1 ESLs, naphthalene (up to 1,500 µg/kg); 1,2-dichloroethane (up to 990 µg/kg) and 1,2-dibromoethane (up to 14,000 µg/kg). However, these chemicals were not present above the human health or odor nuisance level in the upper two feet or above the gross contamination level for soil deeper than two-feet.

#### 4.3.5.3 PAH REMEDIAL GOALS

The PAHs fluoranthene (up to 2,910 µg/kg); fluorene (up to 8,420 µg/kg); 2-methylnaphthalene (up to 16,100 µg/kg) are present above their Tier 1 ESLs. Based on the evaluations discussed above and summarized in Table 3-2, the remedial goals for anthracene and chrysene are 4,100 µg/kg and 2,200 µg/kg, respectively.

#### 4.3.5.4 METAL REMEDIAL GOALS

Based on the anticipated future use and evaluations presented above and summarized in Table 3-3, no metals are present at levels requiring remediation, i.e., no remedial goals are proposed.

#### 4.3.6 Soil Gas Remedial Goals

The data evaluation indicates that chlorinated VOCs (TCE, CE and 1,2-DCA) are present above commercial ESLs in the area near MW-9, which is below future occupied areas (e.g., lobby and leasing office). Therefore, the commercial ESLs have been selected as the applicable remedial goals for these chemicals, i.e., 103  $\mu\text{g}/\text{m}^3$ , 5.2  $\mu\text{g}/\text{m}^3$  and 16  $\mu\text{g}/\text{m}^3$ , for TCE, CE and 1,2-DCA respectively.

Benzene was detected approximately equal to its LTCP criteria for sites with no bioattenuation zone. The soil gas sampling did, however, reveal the presence of oxygen in the area of boring W-28 at 19.4-percent, indicating that a bioattenuation zone was present. Therefore, remedial measures for petroleum-related VOCs in soil gas do not appear warranted.

#### 4.3.7 Groundwater Remedial Goals

The Tier 1 ESLs are based on the use of groundwater as a potable water source. Based on the TDS in groundwater at the Site above 3,000 mg/l, the groundwater in the area exceeds the criteria established in SWRCB Resolution 88-63 for designation as a potable water source. Therefore, where chemicals are present above Tier 1 ESLs, remedial goals were developed based on non-drinking water resource criteria.

As there is no potential discharge of groundwater from the Site to surface water, the remedial goals for VOCs in groundwater were developed based on protection from vapor intrusion for commercial workers in the future building, i.e., benzene at 1.8  $\mu\text{g}/\text{l}$ , PCE at 2.8  $\mu\text{g}/\text{l}$ ; and 1,2-

dichloroethane at 9.8 µg/l. However, the VOC remedial goals are conservative long-term targets, as soil vapor sampling has not revealed the presence of these chemicals above commercial ESLs.

The two samples with detections of benzene, PCE, 1,2-dichloroethane and naphthalene were found from borings W-12 and W-14, which are located beneath the future at-grade parking within the proposed new building (Figure 3-1). Given the anticipated limited exposure time within the garage, the necessity for carbon monoxide control and the lack of detections of vapors at concentrations above commercial screening levels, measures to address the threat from vapor intrusion from groundwater do not appear warranted.

Given the limited extent of TPH in groundwater and the proposed remedial goals for soil to address potential gross contamination, no remedial goals are proposed for TPHg or TPHd in groundwater. There were no detections of TPHg above its gross contamination level of 50,000 µg/l and only one sample of TPHd in a sample from three monitoring wells above its gross contamination level of 2,500 µg/l (MW-5, MW-6 and MW-9).

## **5.0 REMEDIAL ACTION IMPLEMENTATION**

Based on the Site characterization, response actions were developed to address soil and soil gas conditions, under the future Site use of a multi-story podium style mixed-use structure, with commercial uses at-grade and residential above. In addition, portions of the Site, including at-grade portions of the building will be used for parking.

The remedial actions include soil excavation to address: petroleum hydrocarbons and PAHs in soil above cleanup goals. To address VOCs in soil gas above remedial goals, soil will be excavated and, as appropriate, reused on-Site in areas outside of the building footprint and the excavated areas will be backfilled with Portland cement treated soil. If the post-backfill soil gas samples reveal the presence of VOCs above applicable screening levels, then a vapor mitigation system will be installed to control subsurface migration of vapors.

### **5.1 REMEDIAL ACTION PLAN OBJECTIVES**

The objective of the *Remedial Action Plan* is to propose actions to address the contaminants identified as posing an unreasonable risk to public health and safety or the environment. Based on the characteristics of the chemicals of concern, the nature of the Site and regulatory requirements, soil and soil gas response actions were developed to address soil and soil gas above cleanup goals presented in Tables 3-1 to 3-5.

### **5.2 PRE-REMEDIAL ACTION IMPLEMENTATION ACTIVITIES**

The activities to be conducted prior to implementation of the recommended response actions include the following: soliciting public participation; obtaining necessary permits; preparation of a health and safety plan; and utility clearance. Details of the other elements to be addressed prior to soil excavation are presented below.

### **5.2.1 Public Participation**

Opportunities will be provided to obtain public input prior to the implementation of the remedial actions. Public participation activities will be conducted based on the level of community interest in the project. Community acceptance will be addressed based on this input.

#### **5.2.1.1 PUBLIC COMMENT**

Public participation will provide opportunities for the public and other agencies to participate in decisions regarding the remedial actions. The public comment period will be for a minimum of 30-days. The methods for public participation will include:

- Preparing and distributing a Fact Sheet to interested parties describing the proposed remedial measures; and
- Providing a public meeting, if deemed necessary.

##### **5.2.1.1.1 Fact Sheet and Public Notice**

As part of the public communication, a fact sheet will be prepared and distributed that summarizes the Site history and proposed remedial actions. The Fact Sheet will announce the availability of the *Remedial Action Plan* for public review; provide information to the public of the proposed scope of the remedy; and identify where documents will be available for review. In support of the public review process, project documents will be made available to the public.

### **5.2.2 Permitting**

Prior to implementation of the response plan, permits will be obtained for the work. Permits will be obtained and/or notifications will be provided prior to response actions, including: grading permit from the City of San Mateo; and the Bay Area Air Quality Management District (BAAQMD) Regulation 8, Rule 40 notification prior to excavating soil with petroleum

hydrocarbons. In addition, adjacent residents and businesses will be notified of the scheduled work dates approximately one week prior to commencing on-Site activities.

### **5.2.3 Health and Safety**

To address potential exposures to chemicals of potential concern, health and safety procedures have been developed for workers and community during Site development.

#### **5.2.3.1 WORKER HEALTH AND SAFETY**

Due to the potential exposure to residual chemicals in soil and soil gas during response action activities, a *Health and Safety Plan (HASP)* will be prepared and followed by on-Site personnel. The *HASP* addresses the requirements of the Occupational Health and Safety Administration (OSHA) 29 CFR 1910.120 guidelines and Title 8 CCR Section 5192. The *HASP* will be read by Site workers and visitors to apprise them of the Site conditions and provide instructions for implementing proper safety training and procedures during development activities.

As phases of work proceed, the *HASP* will be updated to reflect: Site organizational structure; names of key personnel; personnel training requirements; medical surveillance program; summary of risk assessment; a task-specific hazard analysis; Site control program; personal protective equipment use; air monitoring plan; decontamination procedures; emergency response plan; spill containment; Site sanitation facilities; and standard operating procedures. The contractor conducting the development activities will also use their Injury and Illness Prevention Program (IIPP) in conjunction with the *HASP*.

### **5.2.4 Utility Clearance**

Pursuant to California Assembly Bill AB 73, USA will be contacted to locate and clear work areas for underground utilities at the Site. The work areas will also be cleared for underground utilities using a private underground utility locating contractor.



### **5.2.5 Storm Water Controls**

Storm water pollution control procedures will be implemented to comply with the requirements of the SWRCB Water Quality Order 2009-0009-DWQ and the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* (“the General Permit”). Water pollution control measures to be implemented include, where necessary: 1) berming the Site to contain runoff; 2) installation of silt fence to remove sediments prior to discharge; and 3) installation of hay bales at appropriate locations to contain storm water runoff and to enhance settling of solids. Details of the contractor’s storm water management requirements, which include Best Management Practices for control of storm water run-on and runoff at the Site, will be presented in the *Storm Water Pollution Prevention Plan* for the Site.

## **5.3 REMEDIAL ACTION IMPLEMENTATION**

To address chemicals in soil and soil gas above cleanup goals, the following response actions will be implemented.

### **5.3.1 Site Control**

Excavation areas should be controlled by the contractor to prevent unauthorized entry. Fencing and other barricades should be maintained by the contractor. In addition, the construction entrance should be closed and locked during non-working hours to prevent entrance by unauthorized personnel.

### **5.3.2 Monitoring Well Destruction**

To facilitate remedial excavations, groundwater-monitoring wells within the planned excavation areas will be destroyed in accordance with San Mateo County requirements.

### **5.3.3 Soil Excavation**

Prior to soil removal and pursuant to the requirements of AB 939 requirements, the asphalt concrete pavement will be removed for recycling. The excavation will be advanced vertically and horizontally within the excavation boundaries. The limits of the excavation will be determined based on the post-excavation soil sampling demonstrating that cleanup goals have been achieved. Approximately 4,000 cubic yards of soil containing chemicals in soil above their cleanup goals will be removed between approximately two-feet and 12-feet below ground surface from the identified areas (Figure 3-2).

### **5.3.4 Soil Handling**

Excavated soil will either be direct loaded for direct transport to the disposal facility or stockpiled for characterization and disposition.

#### **5.3.4.1 SOIL LOADING**

The soil transport vehicles will be equipped with plastic sheeting and will be loaded using either a front-end loader or excavator. Trucks transporting soil will not be loaded above the side or rear of the truck bed. The truckload will be covered with a tarp to prevent particulate emissions to the atmosphere. The tarps will be secured per applicable Department of Transportation requirements. Prior to departure, the contractor will check and, as needed, remove loose soil via dry brushing.

#### **5.3.4.2 SOIL STOCKPILE MANAGEMENT**

Stockpiled soil will be placed on paved surfaces or a minimum of 40-mil plastic. Individual stockpiles will not exceed 250 cubic yards and will be less than 20-feet high. The stockpiles will be in place for no longer than 90 days. The stockpile will be covered with either 6-mil reinforced plastic or 10-mil unreinforced plastic sheeting to control dust. The stockpile covers will be anchored with either clean soil or other suitable material. Stockpiled areas will also be bermed to

prevent storm water erosion and/or runoff. Uncovered stockpiles will be watered pursuant to dust control requirements to minimize airborne particulate emissions. The berms surrounding the stockpiled area will be inspected and maintained when the stockpiles are uncovered and water is applied for dust control.

Any portions of the stockpile not being actively worked on during a given day will remain covered with plastic sheeting. Stockpiles will be inspected daily for proper cover.

#### 5.3.4.2.1 Stockpile Sample Collection Methodology

If soil is stockpiled prior to being removed from the Site, discrete samples will be collected from the stockpiled soil for characterization. The frequency of sampling will be conducted in general following the DTSC *Information Advisory – Clean Imported Fill Material* (DTSC, 2001) and in accordance with the waste management facility for soil requiring off-Site disposal. In addition, sampling of stockpiled soil for VOC analysis will follow BAAQMD Rule 8 Regulation 40 requirements, ASTM D 4547, *Standard Guide for Sampling Waste and Solids for Volatile Organics* (ASTM, 2015), USEPA soil sampling guidance (USEPA, 1991) and USEPA waste sampling technical guidance (USEPA, 2002).

The soil samples will be collected from at least three to six-inches below the surface of the stockpile by hand pushing brass-lined tubes into each portion of the stockpile. The ends of the brass-lined tubes will be covered with Teflon© sheets and plastic end caps, labeled, sealed in a plastic bag and placed in a chilled ice chest. Following appropriate sample collection protocols, the soil samples will be transported to a SWRCB ELAP certified laboratory for chemical analysis, following ASTM D 4840 chain-of-custody protocols. The stockpiled samples will be analyzed for the constituents required by the waste management facility for soil requiring off-Site disposal. For VOC analysis, Encore (or equivalent device) aliquots, per USEPA Method 5035, will be collected in the field from the subsurface soil samples and submitted to the analytical laboratory.

#### 5.3.4.3 SOIL DISPOSAL

The final destination of excavated soil will be selected by the owner based on the waste analytical results and acceptance criteria provided by the waste management facilities. The soil samples results will be evaluated using the procedures outlined in *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods* (SW-846; USEPA, 2007). USEPA's SW-846 identifies that the statistically representative concentration will be used when characterizing solid wastes with potentially variable concentrations, i.e., the 90 percent upper confidence level (UCL) concentration. The number of samples and suite of analytes will be determined based on the nature and source of the contamination and waste facility requirements.

It is anticipated that the excavated soil will be characterized as non-hazardous and will be managed at appropriate disposal facility, e.g., Class II or III landfill, or transported for beneficial reuse in accordance with applicable requirements. Potential disposal/reuse facilities for non-hazardous excavated soil include: Altamont Landfill in Livermore; Newby Island in Newark; Dumbarton Quarry in Fremont, Baylands Soil Processing in Brisbane, Ox Mountain Landfill in Half Moon Bay, Potrero Hill Landfill in Suisun City. Potential hazardous waste facilities include: Kettleman Hills Landfill; Buttonwillow Landfill, and US Ecology Nevada Landfill, Beatty, Nevada.

#### **5.3.5 Post-Excavation Soil Sampling**

Post-excavation discrete samples will be collected and analyzed following the removal of the soil to characterize the remaining conditions. The analytical results of the post-excavation discrete soil samples will be compared to the cleanup goals (Table 3-1). The discrete soil samples will be collected from an imaginary grid with cell spacing of approximately 20-feet from the center of the cell, i.e., a minimum of one sample will be collected for each 400 square feet of soil excavation (Figure 3-2). Sidewall samples will be collected at approximately 20-foot spacing along sidewalls deeper than three-feet. Additional samples may be collected as requested by the oversight regulatory agency.

#### 5.3.5.1 SOIL SAMPLE COLLECTION METHODOLOGY

For excavations shallower than four-feet deep, soil samples will be collected using tools such as trowels or scoops. The soil samples will be collected into laboratory-supplied pre-cleaned glass jars outfitted with Teflon-lined lids, labeled and placed in a cooler with ice.

For excavation greater than four-feet deep, soil samples will be collected using hydraulic excavating equipment. The soil samples will be collected by hand pushing a pre-cleaned six-inch long, 1.5-inch diameter stainless steel sample liners into soil contained within the excavating equipment bucket. The ends of the sample liners will then be covered with Teflon® sheets and plastic end caps. The sample liner will then be labeled, placed in a chilled cooler with ice.

The soil samples will be transported to a SWRCB ELAP certified laboratory, following the chain-of-custody procedures outlined in ASTM D 4840.

#### 5.3.6 Engineered Fill

Following the completion of the soil removal and post-excavation sampling activities, the excavations will be backfilled with imported and on-Site material, compacted and graded to restore the ground surface. Import material for backfilling will be characterized prior to placement on the Site. On-Site soil used for backfilling will be also be characterized to confirm that it does not contain chemicals above remedial goals. Discrete samples will be collected from the import source for characterization. The frequency of sampling and suite of analytes for imported soil will be collected in general following the DTSC *Information Advisory – Clean Imported Fill Material* (DTSC, 2001). The analytical results of the import soil samples will be compared to applicable screening criteria to evaluate whether the material is suitable for import. Excavations deeper than 3-feet deep will be backfilled with controlled density fill or cement treated soil to within three-feet of finished grade.

### **5.3.7 Post Backfill Soil Gas Sampling**

Non-excavated subsurface VOC sources (e.g., soil gas) can potentially re-contaminate the backfilled material through vapor transport where excavations are adjacent to residual volatile chemical contamination. Therefore, soil gas samples will be collected following placement of backfill. The soil gas samples will be collected from vapor monitoring wells installed within the backfill material to a depth of 5-feet below ground surface or as adjusted based on the depth of perched groundwater.

### **5.3.8 Contingent Vapor Intrusion Mitigation System**

If the post-backfill soil gas samples reveal the presence of VOCs above applicable remedial goals, then a vapor intrusion mitigation system (VIMS) will be installed to control subsurface migration of vapors. The vapor mitigation system will be comprised of a dispersion vent layer, vapor barrier, foundation seals, and utility trench vapor dams, installed between the backfill and the floor slab of the at-grade occupied ground floor spaces. The VIMS will be adaptable for active ventilation, if monitoring results warrant such modification. The contingent VIMS locations are presented on Figure 5-1.

#### **5.3.8.1 DISPERSION VENT LAYER**

A dispersion layer vent system will be installed to provide a higher permeability zone, i.e., preferential pathway, for the gas to migrate and vent to atmosphere. The dispersion layer will be comprised of a minimum of 4-inches of coarse aggregate meeting ASTM 57, with 85 percent of the surface consisting of fractured faces. The coarse aggregate shall have an open gradation with 100 percent passing the 1.5-inch sieve; 95 to 100 percent passing the 1.0-inch sieve; 26 to 60 percent passing the 0.5-inch sieve; 0 to 10 percent passing the No. 4 sieve; and 0 to 5 percent passing the No. 8 sieve.

#### 5.3.8.2 VAPOR BARRIER

The overlying building foundation in conjunction with membranes and other barriers will be used to retard upward migration of vapors. The vapor barrier layers will include a permeable vented zone overlaid with: a vapor resistant membrane (e.g., EVOH); 40 mil spray applied asphalt/rubber barrier; and a 100 mil non-woven geotextile.

##### 5.3.8.2.1 Vapor Barrier Installation

Proper installation of the vapor barrier is essential for optimal performance. Small imperfections in the barriers (e.g., due to holes, tears, or incomplete seals at the footings or pipe penetrations) can provide a migration route for soil gas when buildings are under negative relative pressure (compared to soil gas pressure).

The vapor barrier must be tested following construction of the vapor barrier and before the placement of concrete over the barrier. The testing will be performed by blowing smoke or some tracer gas under the membrane. If smoke is detected outside of the barrier, additional measures will be undertaken. Methods will be developed to pinpoint imperfections and repair them after installation, e.g., smoke and/or tracer gas testing. Once smoke tested and receiving approval/passing test, the concrete slab/pads may be poured completing the foundation.

The construction will follow quality control procedures, including training of construction workers, to minimize barrier damage during installation and subsequent construction. The installation requirements will include the use of: certified installers; certified inspectors; and smoke testing.

A construction quality assurance plan (CQA Plan) will be used during the installation and testing of the vapor barrier. The CQA Plan will be prepared if it is determined that the contingent vapor mitigation is required. The CQA Plan will follow the applicable ASTM standards for underslab vapor retarders; including those for material specifications with specific criteria that the material

has to meet; both applicable to new materials as well as materials that are conditioned or exposed to simulate service conditions; and the placement and installation of the vapor retarder.

#### 5.3.8.2.2 Foundation Seals

The design also requires sealing of foundation penetrations. Penetrations of the foundation include plumbing, electrical conduits and expansion joints installed during construction. Improper sealing may also increase operational costs due to excessive indoor air flow relative to soil gas capture.

#### 5.3.8.3 UTILITY TRENCH VAPOR DAMS

Vapor dams will be installed in utility trenches that extend beneath the building foundation from areas outside the perimeter of building. The vapor dams will consist of a cement, bentonite and water slurry or controlled low-strength material placed within the utility trench extending a minimum of five feet beginning immediately adjacent to the exterior perimeter of the building foundation and placed a minimum of six inches above the bottom of the perimeter footing to the base of the trench.

### 5.3.9 Post-Construction Monitoring

To document the effectiveness of the vapor barrier, post-construction sampling will be conducted. The sampling will be conducted one time prior to building occupancy at approximately four weeks after completion; with subsequent testing during the potentially “worst-case” months of January/February and June/July (DTSC, 2011). Details of the post-construction indoor air monitoring will be presented in the *Remedial Action Plan Implementation Report (RAIR)*.



#### **5.4 REMEDIAL ACTION IMPLEMENTATION REPORT**

Following implementation of the remedial action described above, a RAIR will be prepared. The RAIR will provide a description of the work completed and a summary of the confirmation testing results that verify that established project-specific remediation goals were met. The report will include a summary of the soil remedial actions activities including: quantity of soil removed; extent of excavation; post-excavation and backfill sampling analytical results; field observations; waste disposal documentation; and pre-occupancy indoor air sampling. Appendices to the report will include copies of the: field data forms; laboratory data certificates; and chain-of-custody forms. The reports will be prepared under the supervision of a California Professional Engineer and California Professional Geologist.

## 6.0 REFERENCES

- ASTM, *Standard Guide for Sample Chain-of-Custody Procedures D 4840-99* (ASTM D 4840).
- ASTM, *Standard Guide for Sampling Waste and Solids for Volatile Organic Compounds* ASTM D4547 (ASTM, 2015)
- Bay Area Geotechnical Group (BAGG), *Phase I and II Environmental Assessment, Former Denny's Site, 470 Concar Drive, San Mateo, California for San Mateo Investors, LLC*, November 7, 2000 (BAGG, 2000).
- Brost, E., and DuVaull, G., Non-Aqueous Phase Liquid (NAPL) Mobility Limits in Soil, American Petroleum Institute, Soil & Groundwater Research Bulletin, June 2000 (Brost and DuVaull, 2000).
- California Department of Water Resources (DWR) *San Francisco Bay Hydrologic Region, Santa Clara Valley Groundwater Basin, San Mateo Subbasin, California's Groundwater Bulletin 118*, February 27, 2004 (DWR 2004).
- California Department of Toxic Substance Control (DTSC), *DTSC Information Advisory Clean Imported Fill Material Fact Sheet*, October 2001 (DTSC, 2001).
- California Department of Toxic Substance Control (DTSC), *Final Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air (Vapor Intrusion Guidance)*, October 2011 (DTSC, 2011).
- California Department of Toxic Substance Control (DTSC), *Advisory – Active Soil Gas Investigations*, July 2015 (DTSC, 2015).
- California Regional Water Quality Control Board - San Francisco Bay Region, *San Francisco Bay (Region 2) Water Quality Control Plan (Basin Plan)*; Water Board, 2017).
- California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), January 2019.
- California State Water Resources Control Board, Low-Threat Closure Policy, April 2012 (SWRCB, 2012).
- Cambria Environmental Technology, Inc, *Groundwater Monitoring Report - First Quarter 2006, Shell-branded Service Station, 1790 South Delaware Street, San Mateo, California, SMSCo Site No. 110022*, February 22, 2006 (Cambria, 2006).
- Certified Environmental Consulting, Inc., Work Plan for Soil and Groundwater Remediation For SEMCO at 1741 Leslie Street, San Mateo, California, December 15, 1992 (CEC, 1992).

Chemical & Metallurgical Engineering (CME), Volume 15,p. 547, November 1, 1916, (CME, 1916).

Duverge, D.J., *Establishing Background Arsenic in Soil of the Urbanized San Francisco Bay Region* documents/2011\_Arsenic\_Background\_Duverge.pdf Accessed April 9, 2014 (Duverge, 2011).

Environ, Environmental Sampling at 470 Concar Drive and 1830 South Delaware Street, May 20 2008 (Environ, 2008).

Environ, *Environmental Sampling at 470 Concar Drive and 1830 South Delaware Street, December 12, 2014* (Environ, 2014).

ERI, Site Conceptual Model, Former Exxon Service Station 74135, 1801 South Delaware Street, San Mateo, California, July 27, 2009 (ERI, 2009).

ERM, Subsurface Investigation Report, Hayward Park, San Mateo, California, April 14, 2021 (ERM, 2021a).

ERM, Supplemental Groundwater Sampling Event at the Caltrain Hayward Park Station Site, June 18, 2021 (ERM, 2021b).

Environmental Resources Management, *Work Plan for Subsurface Assessment of the Hayward Park Caltrain Station January 4, 2018*, (ERM 2018)

Geocon Consultants, Inc., *Report of Findings, Station Park Green, 1700 South Delaware Street, San Mateo, California*, February 2, 2016 (Geocon, 2016).

Golden Gate Tank Removal, Inc., *Groundwater Monitoring Report, Former Vail Burner & Oil Company, 1741 Leslie Street, San Mateo, California, SMC Co Site 110049*, February 25, 2005 (GGTR, 2005).

National Park Service, Photographs, Written Historical and Description Data, Field Records, Alviso Salt Works, 1992 (NPS, 1992).

San Mateo County Environmental Health Division (SMCEH), *Case Closure, Remedial Action Oversight Approval for the Former Vail Burner & Oil Co. Facility Located at 1741 Leslie, San Mateo, California*, September 22, 2015 (SMCEH, 2015).

San Mateo County Environmental Health Division (SMCEH), *Case Closure, Remedial Action Oversight, Station Park green, 1700 South Delaware Street, San Mateo, California*, September 30, 2016 (SMCEH, 2016).

San Mateo County Environmental Health Division (SMCEH), *Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California*, December 7, 2021 (SMCEH, 2021).

United States Environmental Protection Agency (USEPA), *National Primary Drinking Water Regulations – EPA Technical Factsheet, Ethylene Dibromide*, 1998 (USEPA, 1998).

USEPA, *RCRA Waste Sampling Draft Technical Guidance, EPA530-D-02-00*, August 2002 (USEPA, 2002).

USEPA, *Groundwater Sampling Operating Procedure*, SESDPROC-301-R4, [https://www.epa.gov/sites/default/files/2017-07/documents/groundwater\\_sampling301\\_af.r4.pdf](https://www.epa.gov/sites/default/files/2017-07/documents/groundwater_sampling301_af.r4.pdf), April 24, 2017 (USEPA, 2017).

USEPA, *Exposure Factors Handbook*, 2011, found at <https://www.epa.gov/expobox/about-exposure-factors-handbook> (USEPA, 2011).

United States Fish and Wildlife Service (USFWS), *Identification and Evaluation of the South San Francisco Bay Solar Salt Industry Landscape*, March 9, 2009 (USFWS, 2009).

Versar, Inc., *Phase II Environmental Site Assessment, Station Park Green*, April 24, 2014 (Versar, 2014).

Versar, Inc., *Supplemental Phase II Environmental Site Assessment, Station Park Green*, January 27, 2015 (Versar, 2015).

WEST, *Data Gap Investigation Work Hayward Park Caltrain Station, Plan, 401 Concar Drive, San Mateo, California, SMCEH Case No. 119191*, October 4, 2021 (WEST, 2021).

WEST, *Data Gap Investigation Work Plan Addendum, Hayward Park Caltrain Station, 401 Concar Drive, San Mateo, California, SMC Co Case #119191/RO2243, GeoTracker ID T10000008604*, January 11, 2022 (WEST, 2022).

Zemo, D., and Foote, G., *The Technical Case for Eliminating the Use of the TPH Analysis in Assessing and Regulating Dissolved Petroleum Hydrocarbons in Ground Water, Ground Water Monitoring & Remediation*, Summer, 2003 (Zemo, 2003).

## **7.0 DISTRIBUTION LIST**

Ken Busch, P.E. (email only)  
HPS – San Mateo, LLC  
901 Mariners Island Boulevard, Suite 700  
San Mateo, California 94404  
Kbusch@srgnc.com

Rory Campbell, Esq. (email only)  
Hanson Bridgett, LLP  
425 Market Street, 26th Floor  
San Francisco, CA 94105  
rcampbell@hansonbridget.com

Jacob Madden, P.G. (email only)  
Hazardous Material Specialist III  
San Mateo County Groundwater Protection Program  
2000 Alameda de Las Pulgas, Suite 100  
San Mateo, CA 94403

Tom Graf, P.E. (email only)  
Grafcon  
P.O. Box 1105  
Tiburon, CA 94920  
tom@grafcon.us

Geotracker (electronic only)

## **TABLES**

TABLE 2-1  
SUMMARY OF GROUNDWATER ELEVATION DATA  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Screen Interval	Top of Casing Elevation	Date	Depth to Water	Groundwater Elevation	Groundwater Flow Direction	Groundwater Gradient
	(ft bgs)	(ft above MSL)		(ft below TOC)	(ft above MSL)	(degrees)	(ft/ft)
MW-1	3 to 10	11.32	2/26/21	7.67	3.65	59.16	0.05229
			2/23/22	5.93	5.39	62.12	0.0769
MW-2	3 to 10	11.15	2/26/21	6.55	4.60	59.16	0.05229
			2/23/22	5.10	6.05	62.12	0.0769
MW-3	3 to 10	10.76	2/26/21	6.72	4.04	59.16	0.05229
			5/13/21	6.81	3.95	65.83	0.04109
			2/23/22	5.68	5.08	62.12	0.0769
MW-4	3 to 12	12.23	2/26/21	7.76	4.47	59.16	0.05229
			2/23/22	5.01	7.22	62.12	0.0769
MW-5	3 to 10	10.53	2/26/21	3.80	6.73	59.16	0.05229
			2/23/22	2.92	7.61	62.12	0.0769
MW-6	3 to 12	10.16	2/16/21	7.44	2.72	59.16	0.05229
			5/13/21	6.68	3.48	65.83	0.04109
			2/23/22	5.80	4.36	62.12	0.0769
MW-7	3 to 12	9.69	2/26/21	7.79	1.90	59.16	0.05229
			2/23/22	6.13	3.56	62.12	0.0769
MW-8	3 to 12	10.38	2/26/21	4.08	6.30	59.16	0.05229
			2/23/22	4.92	5.46	62.12	0.0769
MW-9	3 to 10	10.44	2/26/21	6.70	3.74	59.16	0.05229
			5/13/21	6.83	3.61	65.83	0.04109
			2/23/22	5.21	5.23	62.12	0.0769

Notes:

ft: Feet  
bgs: below ground surface  
MSL: Mean Sea Level  
TOC: Top of Casing

TABLE 3-1  
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH and VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Depth (feet)	Petroleum Hydrocarbons			VOCs													
			TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	1,2 DCA	1,2-DBA	Isopropyl benzene	N-propyl benzene	1,2,4-TMB	1,3,5-TMB	sec-buytl benzene	4-isopropyl toluene	N-buytl benzene	Naphthalene
			(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-2	5/23/16	1	<1.00	61.7	237	<1.76	<1.76	<1.76	<1.76	--	--	--	--	--	--	--	--	--	--
		7	<1.00	<10.0	<10.0	<3.28	<3.28	<3.28	<3.28	--	--	--	--	--	--	--	--	--	--
W-3	5/23/16	1	<1.00	<10.0	16.6	<1.65	<1.65	<1.65	<1.65	--	--	--	--	--	--	--	--	--	--
		3	<1.00	298	671	<1.66	<1.66	<1.66	<1.66	--	--	--	--	--	--	--	--	--	--
		10	<1.00	<10.0	<10.0	<1.85	<1.85	<1.85	<1.85	--	--	--	--	--	--	--	--	--	--
W-4	5/26/16	1	<1.00	39.5	53.5	<1.72	<1.72	<1.72	<1.72	--	--	--	--	--	--	--	--	--	--
		3	<1.00	320	487	<1.86	<1.86	<1.86	<1.86	--	--	--	--	--	--	--	--	--	--
		7	<1.00	<10.0	<10.0	<1.63	<1.63	<1.63	<1.63	--	--	--	--	--	--	--	--	--	--
W-5	5/23/16	1	<1.00	97.8	353	<1.53	<1.53	<1.53	<1.53	--	--	--	--	--	--	--	--	--	--
		3	<1.00	18.9	13.4	<2.90	<2.90	<2.90	<2.90	--	--	--	--	--	--	--	--	--	--
W-6	5/23/16	1	<1.00	29.9	123	<1.89	<1.89	<1.89	<1.89	--	--	--	--	--	--	--	--	--	--
		2	<1.00	14,700	11,600	<25.0	<25.0	<25.0	<25.0	--	--	--	--	--	--	--	--	--	--
		3	<1.00	361	665	<3.08	<3.08	<3.08	<3.08	--	--	--	--	--	--	--	--	--	--
		7	<1.00	400	376	<1.61	<1.61	<1.61	<1.61	--	--	--	--	--	--	--	--	--	--
W-7	5/26/16	1	<1.00	<10.0	<10.0	<1.71	<1.71	<1.71	<1.71	--	--	--	--	--	--	--	--	--	--
		3	<1.00	51.3	105	<1.78	<1.78	<1.78	<1.78	--	--	--	--	--	--	--	--	--	--
		10	<1.00	<10.0	<10.0	<1.74	<1.74	<1.74	<1.74	--	--	--	--	--	--	--	--	--	--
W-8	5/23/16	1	<1.00	<10.0	17.1	<1.60	<1.60	<1.60	<1.60	--	--	--	--	--	--	--	--	--	--
		3	<1.00	63.8	229	<3.37	<3.37	<3.37	<3.37	--	--	--	--	--	--	--	--	--	--
		7	<1.00	28.2	35.6	<1.59	<1.59	<1.59	<1.59	--	--	--	--	--	--	--	--	--	--
W-9	5/24/16	1	<1.00	132	335	<1.74	<1.74	<1.74	<1.74	--	--	--	--	--	--	--	--	--	--
		3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
W-10	5/26/16	1	<1.00	439	365	<1.66	<1.66	<1.66	<1.66	--	--	--	--	--	--	--	--	--	--
		3	181	875	27.6	<24.4	<24.4	<24.4	<24.4	--	--	--	--	--	--	--	--	--	--
		7	<1.00	<10.0	<10.0	<1.79	<1.79	<1.79	<1.79	--	--	--	--	--	--	--	--	--	--
W-11	5/26/16	1	<1.00	94.5	126	<1.54	<1.54	<1.54	<1.54	--	--	--	--	--	--	--	--	--	--
		3	<1.00	360	183	<1.66	<1.66	<1.66	<1.66	--	--	--	--	--	--	--	--	--	--
W-12	5/25/16	1	<1.00	146	329	<1.64	<1.64	<1.64	<1.64	--	--	--	--	--	--	--	--	--	--
		3	1.2	2,740	1,690	<1.67	<1.67	3.65	<1.67	--	--	--	--	--	--	--	--	--	--
		7	25.5	3,450	1,860	<43	<43	<43	<43	--	--	--	--	--	--	--	--	--	--
		10	25.2	1,800	867	<44.1	<44.1	119	81.3	--	--	--	--	--	--	--	--	--	--
W-13	5/24/16	1	<1.00	364	1,140	<1.71	<1.71	<1.71	<1.71	--	--	--	--	--	--	--	--	--	--
		3	<1.00	10	48.1	<3.35	<3.35	<3.35	<3.35	--	--	--	--	--	--	--	--	--	--
W-14	5/25/16	1	<1.00	136	398	<1.54	<1.54	<1.54	<1.54	--	--	--	--	--	--	--	--	--	--
		3	3.78	4,200	2,850	<1.60	<1.60	<1.60	4.25	--	--	--	--	--	--	--	--	--	--
		7	10.5	8,490	5,430	<55.6	<55.6	143	407	--	--	--	--	--	--	--	--	--	--
		10	122	12,400	6,200	<50	<50	90.8	273	--	--	--	--	--	--	--	--	--	--



TABLE 3-1  
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH and VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Depth (feet)	Petroleum Hydrocarbons			VOCs													
			TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	1,2 DCA	1,2-DBA	Isopropyl benzene	N-propyl benzene	1,2,4-TMB	1,3,5-TMB	sec-buytl benzene	4-isopropyl toluene	N-buytl benzene	Naphthalene
			(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-15	5/24/16	1	<1.00	242	513	<1.70	<1.70	<1.70	<1.70	--	--	--	--	--	--	--	--	--	--
		3	<1.00	90.3	169	<3.17	<3.17	<3.17	<3.17	--	--	--	--	--	--	--	--	--	--
W-16	5/23/16	1	<1.00	<10.0	<10.0	<1.79	<1.79	<1.79	<1.79	--	--	--	--	--	--	--	--	--	--
		7	<1.00	<10.0	<10.0	<1.59	<1.59	<1.59	<1.59	--	--	--	--	--	--	--	--	--	--
W-17	5/25/16	1	<1.00	20.1	81.5	<1.56	<1.56	<1.56	<1.56	--	--	--	--	--	--	--	--	--	--
		3	<1.00	302	1,020	<1.83	<1.83	<1.83	<1.83	--	--	--	--	--	--	--	--	--	--
W-18	5/26/16	1	<1.00	67	254	<1.74	<1.74	<1.74	<1.74	--	--	--	--	--	--	--	--	--	--
		4	<1.00	719	259	<1.42	<1.42	<1.42	<1.42	--	--	--	--	--	--	--	--	--	--
		7	2.56	315	128	<1.70	<1.70	<1.70	<1.70	--	--	--	--	--	--	--	--	--	--
W-19	5/26/16	1	<1.00	41.9	60	<1.53	<1.53	<1.53	<1.53	--	--	--	--	--	--	--	--	--	--
		3	<1.00	23.4	<10.0	<1.53	<1.53	<1.53	<1.53	--	--	--	--	--	--	--	--	--	--
		10	<1.00	<10.0	<10.0	<1.80	<1.80	<1.80	<1.80	--	--	--	--	--	--	--	--	--	--
W-20	5/24/16	1	<1.00	14.9	65.3	<3.15	<3.15	<3.15	<3.15	--	--	--	--	--	--	--	--	--	--
		7	<1.00	<10.0	<10.0	<1.85	<1.85	<1.85	<1.85	--	--	--	--	--	--	--	--	--	--
W-21	5/25/16	3	<1.00	19.1	--	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<2.94	<5.88
		7	<1.00	<10.0	--	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<3.39
W-22	5/25/16	3	<1.00	41.4	--	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<1.67	<3.33
		7	<1.00	<10.0	--	<1.69	<1.69	<1.69	<1.69	2.26	<1.69	<1.69	<1.69	<1.69	<1.69	<1.69	<1.68	<1.68	<3.38
W-23	5/25/16	3	<1.00	133	--	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<1.70	<3.40
		7	<1.00	<10.0	--	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<1.80	<3.59
W-24	5/24/16	3	<1.00	214	--	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<1.62	<3.23
		7	<1.00	<10.0	--	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<1.68	<3.35
HPK-SB-01	12/30/19	1	0.20	20	150	<4.5	0.23	<4.5	<4.5	--	--	--	--	--	--	--	--	--	<4.5
	12/30/19	3	0.25	33	66	<4.2	<4.2	<4.2	<4.2	--	--	--	--	--	--	--	--	--	<4.2
	1/3/20	7	0.14	3.9	21	<3.6	<3.6	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6
	1/3/20	10.5	<1.0	1.9	2.0	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
HPK-SB-02	12/19/19	0.5	0.19	120	920	<6.0	<6.0	<6.0	<6.0	--	--	--	--	--	--	--	--	--	<6.0
	12/19/19	4.5	0.16	4.4	11	<3.8	<3.8	<3.8	<3.8	--	--	--	--	--	--	--	--	--	<3.8
	1/3/20	9	<1.0	0.87	1.7	<3.4	<3.4	<3.4	<3.4	--	--	--	--	--	--	--	--	--	<3.4
	1/3/20	13	0.12	0.52	<5.0	<3.2	<3.2	<3.2	<3.2	--	--	--	--	--	--	--	--	--	<3.2
HPK-SB-03	12/20/19	2.5	0.25	210	670	<4.1	<4.1	<4.1	<4.1	--	--	--	--	--	--	--	--	--	<4.1
	12/20/19	3	1.6	1,400	2,600	0.44	0.51	3.0	2.5	--	--	--	--	--	--	--	--	--	13
	12/20/19	5	7.0	5,200	5,000	<230	<230	100	95	--	--	--	--	--	--	--	--	--	1,500
	1/3/20	8	0.33	46	53	<3.4	0.57	2.6	<3.4	--	--	--	--	--	--	--	--	--	34
	1/3/20	11	0.14	0.67	<5.0	<3.6	<3.6	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6
	1/3/20	14.5	<0.96	0.74	<5.0	<4.0	<4.0	<4.0	<4.0	--	--	--	--	--	--	--	--	--	<4.0

TABLE 3-1  
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH and VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Depth (feet)	Petroleum Hydrocarbons			VOCs													
			TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	1,2 DCA	1,2-DBA	Isopropyl benzene	N-propyl benzene	1,2,4-TMB	1,3,5-TMB	sec-buytl benzene	4-isopropyl toluene	N-buytl benzene	Naphthalene
			(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
HPK-SB-04	12/30/19	1	0.24	3.7	27	<3.9	<3.9	<3.9	<3.9	--	--	--	--	--	--	--	--	--	<3.9
	12/30/19	4.5	0.45	16	38	0.22	0.31	<3.5	<3.5	--	--	--	--	--	--	--	--	--	<3.5
	1/3/20	9.5	0.14	1.8	<5.0	<3.6	<3.6	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6
	1/3/20	13.5	0.33	0.89	1.9	<3.1	2.4	5.6	24	--	--	--	--	--	--	--	--	--	9.4
	1/3/20	15.5	0.39	0.50	<5.0	<3.6	<3.6	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6
HPK-SB-05	12/20/19	0.5	0.99	1,800	2,200	<3.5	<3.5	<3.5	<3.5	--	--	--	--	--	--	--	--	--	<3.5
	12/20/19	5	0.26	49	730	<4.1	<4.1	<4.1	<4.1	--	--	--	--	--	--	--	--	--	<4.1
	1/3/20	8.5	0.23	0.60	<5.0	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
	1/3/20	12.5	0.20	0.93	<5.0	<3.2	<3.2	<3.2	<3.2	--	--	--	--	--	--	--	--	--	<3.2
	1/3/20	14.5	0.20	2.3	7.7	<3.7	<3.7	<3.7	<3.7	--	--	--	--	--	--	--	--	--	<3.7
HPK-SB-06	12/19/19	0.5	0.16	320	1,200	<4.9	<0.5	<4.9	<4.9	--	--	--	--	--	--	--	--	--	<4.9
	12/19/19	4.5	0.23	11	36	<2.5	<2.5	<2.5	<2.5	--	--	--	--	--	--	--	--	--	<2.5
	12/19/19	7	0.17	0.99	2.3	<3.2	<3.2	<3.2	<3.2	--	--	--	--	--	--	--	--	--	<3.2
	12/19/19	11	0.21	0.41	<5.0	<3.6	0.22	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6
	12/19/19	13.5	0.23	0.53	<5.0	<3.9	0.17	<3.9	<3.9	--	--	--	--	--	--	--	--	--	<3.9
HPK-SB-07	12/30/19	1	0.17	120	1,400	<6.1	<6.1	<6.1	<6.1	--	--	--	--	--	--	--	--	--	<6.1
	12/30/19	5	44	8,200	11,000	<360	<360	<360	<360	--	--	--	--	--	--	--	--	--	140
	1/3/20	6	2.9	98	110	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	1.2
	1/3/20	9	20	730	780	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	1.1
	1/3/20	11.5	0.55	2.4	3.0	<3.3	0.25	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
HPK-SB-08	12/20/19	0.5	<0.93	100	600	<4.1	<4.1	<4.1	<4.1	--	--	--	--	--	--	--	--	--	<4.1
HPK-SB-09	12/19/19	0.5	0.16	3.5	11	<4.5	<4.5	<4.5	<4.5	--	--	--	--	--	--	--	--	--	<4.5
	12/19/19	5	0.28	21	190	<3.2	<3.2	<3.2	<3.2	--	--	--	--	--	--	--	--	--	<3.2
	1/3/20	8.5	0.13	1.0	<5.0	<3.0	<3.0	<3.0	<3.0	--	--	--	--	--	--	--	--	--	<3.0
	1/3/20	11.5	<0.95	0.87	<5.0	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
HPK-SB-10	12/20/19	1	0.23	260	770	<4.7	<4.7	<4.7	<4.7	--	--	--	--	--	--	--	--	--	<4.7
	1/3/20	4.5	1.1	860	1,300	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
	1/3/20	8	1.2	640	2,300	<4.1	<4.1	<4.1	<4.1	--	--	--	--	--	--	--	--	--	<4.1
	1/3/20	10.5	0.16	4.2	7.1	<3.2	<3.2	<3.2	<3.2	--	--	--	--	--	--	--	--	--	<3.2
HPK-SB-11	12/30/19	0.5	0.2	18	170	<4.2	0.19	<4.2	<4.2	--	--	--	--	--	--	--	--	--	<4.2
	12/30/19	4.5	0.33	180	750	<3.3	<3.3	<3.3	<3.3	--	--	--	--	--	--	--	--	--	<3.3
	1/3/20	9	0.37	3.8	21	<3.8	<3.8	<3.8	<3.8	--	--	--	--	--	--	--	--	--	<3.8
	1/3/20	14.5	0.28	1.4	3.2	<3.6	<3.6	<3.6	<3.6	--	--	--	--	--	--	--	--	--	<3.6

TABLE 3-1  
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH and VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Depth (feet)	Petroleum Hydrocarbons			VOCs													
			TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	1,2 DCA	1,2-DBA	Isopropyl benzene	N-propyl benzene	1,2,4-TMB	1,3,5-TMB	sec-buytl benzene	4-isopropyl toluene	N-buytl benzene	Naphthalene
			(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
HPK-SB-12	12/30/19	1	0.19	90	490	<4.0	<4.0	<4.0	<4.0	--	--	--	--	--	--	--	--	--	<4.0
	12/30/19	5	45	5,500	6,100	<180	<180	30	<180	--	--	--	--	--	--	--	--	--	130
	1/3/20	7	3.5	1,500	1,600	0.65	0.39	2.5	<3.6	--	--	--	--	--	--	--	--	--	9.2
	1/3/20	10	10	1,500	1,500	0.59	0.43	11	5.4	--	--	--	--	--	--	--	--	--	42
	1/3/20	17.5	3.1	760	810	0.31	0.18	4.8	<3.4	--	--	--	--	--	--	--	--	--	15
	1/3/20	20	1.0	320	350	0.42	<3.5	<3.5	<3.5	--	--	--	--	--	--	--	--	--	0.33
MW-1	2/9/21	9	0.084	1.5	3.9	<3.8	<3.8	<3.8	<7.6	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
MW-2	2/10/21	4.5	0.10	64	49	0.2	<4.0	<4.0	<7.9	<4.0	2.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
MW-3	2/9/21	6	76	6.0	6.2	<210	<210	<210	<420	<210	<210	<210	<210	<210	<210	<210	<210	<210	<210
MW-4	2/9/21	7	0.023	1.4	4.2	<3.4	<3.4	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
		11	0.021	1.5	3.3	<3.5	<3.5	<3.5	<6.9	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-5	2/8/21	3	44	730	250	<300	<300	94	<600	<300	<300	<300	56	<300	<300	<300	<300	<300	150
		9	0.030	1.7	4.9	<3.5	<3.5	<3.5	<6.9	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-6	2/8/21	5	17	1.9	4.9	<240	<240	<240	<480	<240	<240	<240	<240	<240	<240	<240	<240	<240	<240
		12	0.033	1.8	5.1	<3.7	<3.7	<3.7	<7.4	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7
MW-7	2/10/21	12	0.04	52	43	<3.7	<3.7	<3.7	<7.4	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7	<3.7
		4	0.078	<10	<20	<4.5	<4.5	<4.5	<9.1	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5	<4.5
		8	0.062	<10	<20	<3.4	<3.4	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
MW-8	2/10/21	4.5	0.045	4.2	<20	<4.0	<4.0	<4.0	<7.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
		9	0.026	<10	<20	<3.4	<3.4	<3.4	<6.8	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4	<3.4
		11.5	0.025	<10	5.4	<3.5	<3.5	<3.5	<7.0	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5	<3.5
MW-9	2/9/21	4	250	11,000	3,000	<490	<490	59	<980	<490	<490	99	150	<490	<490	170	<490	150	<490
	2/10/21	7	67	<10	<20	<190	<190	31	<370	<190	<190	37	52	<190	<190	52	<190	52	<190
		10	0.50	<10	<20	0.2	<3.8	<3.8	<7.6	990	14,000	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8	<3.8
W-25	2/23/22	0.5	--	--	--	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<2.43	<4.85
		3	--	--	--	<1.78	<1.78	<1.78	<1.78	5.38	<1.78	<1.78	<1.78	<1.78	<1.78	<1.78	<1.78	<1.78	<3.55
		6	--	--	--	<2.65	<2.65	<2.65	<2.65	4.23	<2.65	<2.65	<2.65	<2.65	<2.65	<2.65	<2.65	<2.65	<5.30
		10	--	--	--	<23.5	<23.5	<23.5	<23.5	613	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<23.5	<47.0
W-26	2/23/22	0.5	--	--	--	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<1.98	<3.95
		3	--	--	--	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<1.76	<3.51
		6	--	--	--	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<24.5	<48.9
		10	--	--	--	<24.2	<24.2	72.6	<24.2	34.2	<24.2	150	225	140	118	164	71.4	236	131
			--	--	--	<1.54	<1.54	<1.54	<1.54	5.24	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<1.54	<3.07

TABLE 3-1  
SUMMARY OF SOIL ANALYTICAL RESULTS - TPH and VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Depth (feet)	Petroleum Hydrocarbons			VOCs													
			TPHg	TPHd	TPHmo	Benzene	Toluene	Ethyl benzene	Xylenes	1,2 DCA	1,2-DBA	Isopropyl benzene	N-propyl benzene	1,2,4-TMB	1,3,5-TMB	sec-buytl benzene	4-isopropyl toluene	N-buytl benzene	Naphthalene
			(mg/kg)	(mg/kg)	(mg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-27	2/23/22	3	--	--	--	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<1.85	<3.69
		4	--	--	--	<26.2	<26.2	<26.2	59.9	<26.2	<26.2	<26.2	26.4	107	53.5	28.6	48.2	70.4	224
		6	--	--	--	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	<3.42
		10	--	--	--	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<2.40	<4.79
Tier 1 ESLs			100	260	1,600	2.5	3,200	430	2,100	7.0	0.53	--	--	--	--	--	--	--	42
Direct Exposure - Commercial (S-1)			2,000	1,200	18,000	1,400	5,300,000	26,000	2,500,000	2,100	160	--	--	--	--	--	--	--	17,000
Terrestrial Habitat (Commerical)			120	260	1,600	--	--	--	--	29,000	--	--	--	--	--	--	--	--	28,000
Leaching to Groundwater - NDW (S-3)			4,900	7,300	--	--	--	--	--	31	1.9	--	--	--	--	--	--	--	1,200
Gross Contamination gravel (S-4)			1,000	2,300	5,100	--	--	--	--	3.E+06	1.E+06	--	--	--	--	--	--	--	280,000
Gross Contamination - Silt/Sand			--	8,000	17,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Odor Nuisance (S-5) (Upper 2-feet)			500	1,000	--	--	--	--	--	500,000	1.E+06	--	--	--	--	--	--	--	100,000
Remediation Goal - Upper 2-feet			--	1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Remediation Goal - Deeper 2-feet			--	8,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

- TPH: Total Petroleum Hydrocarbons

VOCs: Volatile Organic Compounds

TPHg: Total Petroleum Hydrocarbons as gasoline

TPHd: Total Petroleum Hydrocarbons at diesel

TPHmo: Total Petroleum Hydrocarbons as motor oil

TMB: Trimethylbenzene
- mg/kg: milligrams per kilogram

µg/kg: micrograms per kilogram

<3.15: Less than the laboratory-reporting limit of 3.15

DCA: Dichloroethane

DBA: Dibromoethane

Tier 1 ESLs: California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), February 2019  
Tier 2 ESL: ESL excluding leaching to drinking water source and ecological receptors

TABLE 3-2  
SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs, PESTICIDES AND PCBs  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Date	Depth (feet)	SVOCs									Pesticides			
			Acenaphthene	Anthracene	Benzo(a) anthracene	Chrysene	Fluoranthene	Fluorene	2-Methyl naphthalene	Phenanthrene	Pyrene	Chlordane	Dieldrin	4,4-DDD	PCBs
			(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-2	5/23/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-3	5/23/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		10	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-4	5/26/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-5	5/23/16	1	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<12.5	<5.00	<5.00	25.2
		3	<330	<330	<330	<330	<330	<330	<330	358	<330	<12.5	<5.00	<5.00	<25.0
W-6	5/23/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		2	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<25.0	<25.0	<25.0	<25.0
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-7	5/26/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		10	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-8	5/23/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-9	5/24/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		3	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-10	5/26/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	8.18	<25.0
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0

TABLE 3-2  
SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs, PESTICIDES AND PCBs  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Date	Depth (feet)	SVOCs									Pesticides			
			Acenaphthene	Anthracene	Benzo(a) anthracene	Chrysene	Fluoranthene	Fluorene	2-Methyl naphthalene	Phenanthrene	Pyrene	Chlordane	Dieldrin	4,4-DDD	PCBs
			(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-11	5/26/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	14.8	<5.00	<5.00	<25.0
		3	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-12	5/25/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		10	<330	<330	<330	<330	<330	1,090	<330	1,960	<330	<12.5	<5.00	<5.00	<25.0
W-13	5/24/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	89.7
		3	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<12.5	<5.00	<5.00	<25.0
W-14	5/25/16	1	<1,650	2,160	<1,650	<1,650	2,910	<1,650	<1,650	3,430	3,770	20.5	7.57	<5.00	40.9
		3	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<1,650	<1,650	2,610	2,390	<1,650	5,930	16,100	8,190	5,680	<12.5	<5.00	<5.00	<25.0
		10	<1,650	10,500	5,040	4,050	<1,650	8,420	14,500	9,330	9,860	<125	<50	<50	<250
W-15	5/24/16	1	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<16,500	<12.5	<5.00	<5.00	<25.0
		3	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-16	5/23/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-17	5/25/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<125	<50	<50	<250
W-18	5/26/16	1	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<1,650	<25.0	<25.0	<25.0	<250
		4	--	--	--	--	--	--	--	--	--	--	--	--	--
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
W-19	5/26/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
		3	507	<330	<330	<330	<330	<330	<330	551	<330	<12.5	<5.00	<5.00	<25.0
		10	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0

TABLE 3-2  
SUMMARY OF SOIL ANALYTICAL RESULTS - SVOCs, PESTICIDES AND PCBs  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Date	Depth (feet)	SVOCs									Pesticides			
			Acenaphthene	Anthracene	Benzo(a) anthracene	Chrysene	Fluoranthene	Fluorene	2-Methyl naphthalene	Phenanthrene	Pyrene	Chlordane	Dieldrin	4,4-DDD	PCBs
			(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
W-20	5/24/16	1	<330	<330	<330	<330	<330	<330	<330	<330	<330	109	<5.00	<5.00	<25.0
		7	<330	<330	<330	<330	<330	<330	<330	<330	<330	<12.5	<5.00	<5.00	<25.0
Tier 1 ESLs		12,000	1,900	630	2,200	690	6,000	880	7,800	45,000	8.5	0.46	2,700	230	
Direct Exposure - Commercial (S-1)		--	2.E+08	2.E+04	2.E+06	--	3.E+07	3.E+06	--	--	2,200	160	--	--	
Plants & Soil		--	40,000	310,000	18,000	--	--	--	16,000	--	8.5	110	--	--	
Leaching to Groundwater - NDW (S-3)		--	1,900	10,000	10,000	--	6,000	880	11,000	--	23,000	6.30	--	--	
Gross Contamination - Gravel (S-4)		--	4,100	1,900,000	2,200	--	94,000	380,000	69,000	--	23,000.0	24,000	--	--	
Odor Nuisance (S-5) (Upper 2-feet)		--	1.E+06	1.E+06	1.E+06	--	1.E+06	1.E+06	1.E+06	--	2.5E+06	1.E+06	--	--	
Remediation Goal - Upper 2-feet		--	4,100	--	2,200	--	--	--	--	--	--	--	--	--	
Remediation Goal - Deeper 2-feet		--	4,100	--	2,200	--	--	--	--	--	--	--	--	--	

Notes:

SVOCs: Semi-volatile Organic Compounds

PCBs: Polychlorinated biphenyls

DDD: Dichlorodiphenyldichloroethane

µg/kg: micrograms per kilogram

<330: Less than the laboratory-reporting limit

ESLs: California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), February 2019

Tier 2 ESL excluding leaching to drinking water source and ecological receptors

TABLE 3-3  
SUMMARY OF SOIL ANALYTICAL RESULTS - METALS  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Date	Depth (feet)	Metals										
			Arsenic <sup>1</sup>	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
W-2	5/23/16	1	<2.50	--	--	--	--	19.4	--	--	--	--	--
		3	3.19	--	--	--	--	6.65	--	--	--	--	--
		7	2.87	283	33.4	13.7	15.5	6.95	<0.100	<2.50	31.8	40.5	26.7
		10	<2.50	--	--	--	--	4.12	--	--	--	--	--
W-3	5/23/16	1	<2.50	270	4.9	5.95	<2.50	<2.50	<0.100	<2.50	<2.50	36.2	84.5
		3	3.63	--	--	--	--	26.1	--	--	--	--	--
		7	<2.50	--	--	--	--	8.43	--	--	--	--	--
		10	2.73	--	--	--	--	7.69	--	--	--	--	--
W-4	5/26/16	1	<2.50	--	--	--	--	2.52	--	--	--	--	--
		3	5.03	--	--	--	--	30.5	--	--	--	--	--
		7	<2.50	--	--	--	--	4.65	--	--	--	--	--
		10	8.03	170	86.7	32.3	26.6	14.2	<0.250	<2.50	70.7	82.9	46.8
W-5	5/23/16	1	4.88	--	--	--	--	29.1	--	--	--	--	--
		3	10.1	67.8	26.3	12.6	46.7	15.3	0.178	<2.50	40.7	29.8	82.2
		7	2.55	--	--	--	--	8.12	--	--	--	--	--
		10	4.07	--	--	--	--	9.11	--	--	--	--	--
W-6	5/23/16	1	<2.50	--	--	--	--	<2.50	--	--	--	--	--
		3	12.2	--	--	--	--	40.9	--	--	--	--	--
		7	5.40	--	--	--	--	14.5	--	--	--	--	--
		10	4.31	--	--	--	--	12.5	--	--	--	--	--
W-7	5/26/15	1	<2.50	--	--	--	--	<2.50	--	--	--	--	--
		3	2.54	--	--	--	--	116	--	--	--	--	--
		7	4.04	143	31.5	11.1	16.7	9.13	<0.250	<2.50	30.3	40.9	33.4
		10	<2.50	--	--	--	--	4.47	--	--	--	--	--
W-8	5/23/16	1	<2.50	--	--	--	--	2.83	--	--	--	--	--
		3	<2.50	--	--	--	--	35.7	--	--	--	--	--
		7	3.14	--	--	--	--	9.01	--	--	--	--	--
		10	6.02	--	--	--	--	12.4	--	--	--	--	--
W-9	5/24/16	1	4.95	223	37.4	12.1	31.2	19.1	0.11	<2.50	41.4	43.1	71.8
		3	4.07	--	--	--	--	11.7	--	--	--	--	--
		7	2.53	--	--	--	--	8.31	--	--	--	--	--
		10	2.60	--	--	--	--	6.37	--	--	--	--	--
W-10	5/26/16	1	<2.50	--	--	--	--	16.9	--	--	--	--	--
		3	4.59	--	--	--	--	4.19	--	--	--	--	--
		7	<2.50	--	--	--	--	6.65	--	--	--	--	--
		10	5.00	148	46.1	18.4	17.4	10	<0.250	<2.50	47.9	50.7	36.2
W-11	5/26/16	1	3.71	--	--	--	--	40	--	--	--	--	--
		3	7.85	219	66.6	14.7	69.6	200	<0.250	<2.50	104	36.6	188
		7	8.93	--	--	--	--	228	--	--	--	--	--
		10	<2.50	--	--	--	--	3.82	--	--	--	--	--
W-12	5/25/16	1	4.67	--	--	--	--	50.7	--	--	--	--	--
		3	3.95	--	--	--	--	144	--	--	--	--	--
		7	3.23	105	21.9	8.03	16.2	7.76	<0.100	<2.50	18.6	32.8	22.9
		10	6.19	--	--	--	--	14.8	--	--	--	--	--



TABLE 3-3  
SUMMARY OF SOIL ANALYTICAL RESULTS - METALS  
Caltrain Hayward Park Station  
San Mateo, California

Sample ID	Date	Depth (feet)	Metals										
			Arsenic <sup>1</sup>	Barium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Vanadium	Zinc
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
W-13	5/24/16	1	2.96	--	--	--	--	22.6	--	--	--	--	--
		3	2.69	--	--	--	--	16.5	--	--	--	--	--
		7	3.69	--	--	--	--	7.9	--	--	--	--	--
		10	3.93	--	--	--	--	8.24	--	--	--	--	--
W-14	5/25/16	1	6.31	--	--	--	--	49.6	--	--	--	--	--
		3	5.28	--	--	--	--	41.3	--	--	--	--	--
		7	5.74	--	--	--	--	49.2	--	--	--	--	--
		10	5.2	182	28.4	6.45	18.3	125	0.556	<2.50	44.6	32.9	59.4
W-15	5/24/16	1	<2.50	--	--	--	--	6.52	--	--	--	--	--
		3	4.08	--	--	--	--	64.2	--	--	--	--	--
		7	3.51	249	29.6	9.77	15.6	7.56	<0.100	<2.50	28.4	43.3	26.4
		10	<2.50	--	--	--	--	4.73	--	--	--	--	--
W-16	5/23/16	1	<2.50	243	5.15	5.08	<2.50	<2.50	<0.100	<2.50	<2.50	32.7	71.5
		3	8.53	--	--	--	--	279	--	--	--	--	--
		7	3.86	--	--	--	--	7.95	--	--	--	--	--
		10	3.07	--	--	--	--	5.24	--	--	--	--	--
W-17	5/25/16	1	<2.50	--	--	--	--	15.6	--	--	--	--	--
		3	11.5	--	--	--	--	531	--	--	--	--	--
		7	<2.50	--	--	--	--	2,640	--	--	--	--	--
		10	<2.50	107	34.1	2.68	9.66	5.36	<0.100	<2.50	26.1	26.4	63.2
W-18	5/26/16	1	2.64	--	--	--	--	37.4	--	--	--	--	--
		3	4.46	114	25	10.4	17.9	23.1	<0.250	<2.50	29.5	32	48.4
		7	<2.50	--	--	--	--	5.08	--	--	--	--	--
		10	3.20	170	37.1	30.4	16.4	7.27	<0.250	<2.50	47.9	38.2	31.7
W-19	5/26/16	1	<2.50	--	--	--	--	18.5	--	--	--	--	--
		3	3.49	--	--	--	--	17.7	--	--	--	--	--
		7	2.69	--	--	--	--	5.75	--	--	--	--	--
		10	3.10	130	30	10.2	14.6	7.68	<0.250	<2.50	33.5	35.3	26.2
W-20	5/24/16	1	12.7	--	--	--	--	106	--	--	--	--	--
		3	3.75	--	--	--	--	35.8	--	--	--	--	--
		7	<2.50	--	--	--	--	7.16	--	--	--	--	--
		10	3.37	--	--	--	--	7.01	--	--	--	--	--
Tier 1 ESLs			0.067	390	160	23	180	32	13	6.9	86	18	340
Direct Exposure - Commercial (S-1)			--	--	--	350	--	320	--	--	--	470	--
Plants & Soil			--	--	--	--	--	32	--	--	--	18	--
Ambient			11	--	--	--	--	--	--	--	--	160	--
Remediation Goal - Upper 2-feet			--	--	--	--	--	--	--	--	--	--	--
Remediation Goal - Deeper 2-feet			--	--	--	--	--	--	--	--	--	--	--

Notes:

mg/kg: milligrams per kilogram

--: Not analyzed

<2.50: Less than the laboratory-reporting limit

<sup>1</sup>: Background arsenic in the San Francisco Bay Region has been estimated at 15 mg/kg (Regional Board, 1998)

ESLs: California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), February 2019

TABLE 3-4  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - TPH AND VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Total Petroleum Hydrocarbons			Chlorinated VOCs						Petroleum Related VOCs												Other		
		TPHg	TPHd	TPHmo	PCE	trans-1,2-DCE	CE	CA	CM	DCM	Benzene	Toluene	Ethyl benzene	Xylenes	1,2-DCA	1,2,4-TMB	1,3,5-TMB	Naph-thalene	TBA	N-Butyl benzene	Isopropyl benzene	N-propyl benzene	Bromo-form	1,2-DBA	Bromo-methane
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
W-3	5/24/16	<50	325	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-6	5/24/16	<50	2,950	--	<0.500	--	--	2.65	7.81	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	3.08
W-9	5/25/16	<50	838	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-12	5/25/16	198	11,700	--	4.76	--	--	<0.500	<0.500	--	2.69	0.59	2.29	1.01	<0.500	<0.500	0.62	9.87	--	<0.500	<0.500	0.500	--	<0.500	<0.500
W-14	5/25/16	185	8,460	--	<0.500	--	--	<0.500	<0.500	--	4.62	1.6	1.39	3.63	<0.500	1.78	0.77	23.5	--	0.63	<0.500	1.54	--	<0.500	<0.500
W-15	5/25/16	<50	1,260	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-17	5/25/16	<50	566	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-21	5/25/16	<50	--	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-22	5/25/16	256	811	--	<50.0	--	--	<50.0	<50.0	--	<50.0	<50.0	<50.0	<50.0	5,750	<50.0	<50.0	<100	--	<50.0	<50.0	<50.0	--	<0.500	<50.0
W-23	5/25/16	<50	264	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	2.89	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
W-24	5/24/16	<50	570	--	<0.500	--	--	<0.500	<0.500	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	--	<0.500	<0.500
HPK-SB-02-GW	1/3/20	19	420	--	--	--	--	--	--	--	<0.5	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
HPK-SB-04-GW	1/3/20	60	2,900	--	--	--	--	--	--	--	0.2	0.4	0.5	0.5	--	--	--	--	--	--	--	--	--	--	--
		62	2,400	--	--	--	--	--	--	--	0.2	0.5	0.6	0.6	--	--	--	--	--	--	--	--	--	--	--
HPK-SB-10-GW	1/3/20	26	--	--	--	--	--	--	--	--	0.1	<0.5	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--
HPK-SB-12-GW	1/3/20	94	8,600	--	--	--	--	--	--	--	2.3	0.4	1.5	1.5	--	--	--	--	--	--	--	--	--	--	--
W-25-12'	2/23/22	--	--	--	<20	<20	<20	<20	<20	<100	<20	<20	<20	<20	2,610	<20	<20	<40	--	<20	<20	<20	<20	<20	<20
		--	--	--	<20	<20	<20	<20	<20	<100	<20	<20	<20	<20	2,740	<20	<20	<40	--	<20	<20	<20	<20	<20	<20
W-26-14'	2/24/22	--	--	--	<1.00	<1.00	<1.00	<1.00	<1.00	<5.00	2.12	<1.00	1.34	<1.00	40.8	1.66	1.01	<2.00	--	<1.00	1.94	2.24	<1.00	<1.00	<1.00
W-27-12'	2/23/22	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
W-33-2.5-GW	2/28/22	--	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-1	2/26/21	150	360	--	--	--	--	--	--	--	<1.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	--	--	--	--
	2/26/21	<50	1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	2/23/22	<50.0	434	170	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-2	2/26/21	<50	1,000	--	--	--	--	--	--	--	<1.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	--	--	--	--
	2/23/22	<50.0	1,130	1,140	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-3	2/26/21	25	1,400	--	--	--	--	--	--	--	<1.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	--	--	--	--
	5/13/21	<50	1,700	--	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	<0.5	<0.5	<0.5	0.05	<0.5	<0.5	<0.5	<2.0	1.5	<0.5	--	--	<1.0	<0.5	<1.0
	2/24/22	<50.0	1,520	1,120	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-4	2/26/21	25	810	--	--	--	--	--	--	--	<1.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	--	--	--	--
	2/23/22	<50.0	1,140	924	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-5	2/26/21	<500	1,900	--	--	--	--	--	--	--	<10	<50	<50	<100	--	--	--	--	--	--	--	--	--	--	--
	2/24/22	<50.0	3,320	2,370	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-6	2/26/21	320	1,500	--	--	--	--	--	--	--	<5.0	<25	<25	<50	--	--	--	--	--	--	--	--	--	--	--
	5/13/21	<50	3,200	--	<2.5	<2.5	<2.5	<2.50	<2.5	1.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<10.0	11	<2.5	--	--	<5.0	<2.5	<5.0
	2/23/22	<50.0	2,720	1,680	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-7	2/26/21	26	630	--	--	--	--	--	--	--	<1.0	<5.0	<5.0	<10	--	--	--	--	--	--	--	--	--	--	--
	2/23/22	<50.0	927	624	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500
MW-8	2/26/21	200	530	--	--	--	--	--	--	--	<2.0	<10	<10	<20	--	--	--	--	--	--	--	--	--	--	--
	2/24/22	<50.0	470	585	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	--	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500

TABLE 3-4  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS - TPH AND VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Date	Total Petroleum Hydrocarbons			Chlorinated VOCs						Petroleum Related VOCs												Other			
		TPH <sub>g</sub>	TPH <sub>d</sub>	TPH <sub>mo</sub>	PCE	trans-1,2-DCE	CE	CA	CM	DCM	Benzene	Toluene	Ethyl benzene	Xylenes	1,2-DCA	1,2,4-TMB	1,3,5-TMB	Naphthalene	TBA	N-Butyl benzene	Isopropyl benzene	N-propyl benzene	Bromo-form	1,2-DBA	Bromo-methane	
		(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-9	2/26/21	46,000	3,300	--	<130	--	--	<250	<130	--	<130	<130	<130	<250	4,900	<130	<130	<500	--	<130	--	--	--	--	59,000	<500
	5/13/21	220	4,300	--	<2.5	1.3	1.4	<2.5	<2.5	4.6	1.2	0.7	<2.5	<5.0	38	<2.5	<2.5	<10	11	<2.5	--	--	3.6	190	<10	
		280	4,800	--	<2.5	1.3	1.3	<2.5	<2.5	6.8	1.3	0.9	0.9	0.6	54	<2.5	<2.5	<10	12	<2.5	--	--	16	360	<10	
	2/24/22	54.90	3,410 <sup>a</sup>	766	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	0.530	<0.500	<0.500	<0.500	5.21	<0.500	<0.500	<1.00	--	<0.500	--	--	<0.500	1.39	<0.500	
		50.80	--	--	<0.500	<0.500	<0.500	<0.500	<0.500	<2.50	0.540	<0.500	<0.500	0.500	5.08	<0.500	<0.500	<1.00	--	<0.5	<0.5	<0.5	<0.500	1.74	<0.500	
Tier 1 ESL		100	100	--	0.64	10	0.0086	16	190	5.0	0.42	40	3.5	20	0.5	--	--	0.17	12	--	--	--	--	80	50	7.5
Aquatic Protection		440	640	--	120	590	780	--	1,100	2,200	46	130	43	100	10,000	--	--	15	18,000	--	--	--	--	1,100	1,400	160
Gross Contamination		50,000	2,500	--	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	--	--	16,000	50,000	--	--	--	--	50,000	50,000	50,000
Odor Nuisance Levels		5,000	5,000	--	3,000	2,600	34,000	160	--	91,000	20,000	400	300	5,300	200,000	--	--	210	--	--	--	--	--	5,100	--	--
Vapor Intrusion - Commercial		--	--	--	2.8	920	0.14	97,000	1,100	94	1.8	4,900	15	1,600	9.8	--	--	20	--	--	--	--	510	0.76	73	
Maximum Contaminant Level		--	--	--	5.0	10	0.5	21,000	190	5.0	1.0	40	30	20	0.5	--	--	0.17	12	--	--	--	80	0.05	7.5	
Remedial Goal		--	--	--	2.8	--	0.14	--	--	--	1.8	--	--	--	9.8	--	--	--	--	--	--	--	--	--	--	

Notes:

TPH: Total Petroleum Hydrocarbons  
VOCs: Volatile Organic Compounds  
TPHg: Total Petroleum Hydrocarbons as gasoline  
TPHd: Total Petroleum Hydrocarbons as diesel  
TPHmo: Total Petroleum Hydrocarbons as motor oil  
PCE: Tetrachloroethene  
DCE: Dichloroethene  
CE: Chloroethene (aka vinyl chloride)  
CA: Choroethane  
CM: Chloromethane

DCM: Dichloromethane (aka Methylene Chloride)  
DCA: Dichloroethane  
TMB: Trimethylbenzene  
TBA: Tert Butyl Alcohol  
DBA: Dibromoethane  
µg/l: Micrograms per liter  
<0.500: Less than the laboratory reporting limit of 0.500  
a: Unknown hydrocarbon with several peaks  
ESLs: California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), February 2019, Rev.2

TABLE 3-5  
SUMMARY OF SOIL GAS ANALYTICAL RESULTS - VOCs  
Caltrain Hayward Park Station  
San Mateo, California

FieldPoint ID	Depth (feet)	Date	Chlorinated VOCs											Petroleum Related VOCs								Atmospheric Gases			Vacuum	Helium Leak Check
	(ft bgs)		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	CE	CA	CM	1,1-DCE	1,2-DCA	1,2-DCP	1,3-DCB	Benzene	Toluene	Ethyl benzene	Xylenes	1,2,4-TMB	1,3,5-TMB	Naph-thalene	1,2-DBA	Methane	Carbon Dioxide	Oxygen	(Inches Hg)	(% V)
W-2	3.5	5/23/16	<6.78	<5.37	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	6.19	3.67	24	<4.34	6.95	6.49	<4.92	--	<7.68	--	--	--	--	--
W-5	3.5	5/23/16	<6.78	<5.37	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	7.28	21	<4.34	15.5	7.23	<4.92	--	<7.68	--	--	--	--	--
W-8	3.5	5/24/16	<6.78	<5.37	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	7.58	7.7	46.5	<4.34	<4.34	<4.92	<4.92	--	<7.68	--	--	--	--	--
W-13	3.5	5/24/16	10.3	--	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	4.66	6.26	<4.34	<4.34	<4.92	<4.92	--	<7.68	--	--	--	--	--
W-16	3	5/25/16	<6.78	--	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	8.66	9.81	11.5	<4.34	<4.34	<4.92	<4.92	--	<7.68	--	--	--	--	--
W-20	3.5	5/24/16	<6.78	<5.37	<3.97	--	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	7.94	6.49	11	<4.34	<4.34	<4.92	<4.92	--	<7.68	--	--	--	--	--
W-28	4	2/25/22	<6.78	<5.37	<3.97	<3.96	<2.56	6.65	8.55	<3.97	<4.05	<4.62	<6.01	285	122	95.4	541	611	237	154	<7.68	0.357	0.251	19.4	-4	<0.100
		2/25/22	<6.78	<5.37	<3.97	<3.96	<2.56	6.33	8.47	<3.97	<4.05	<4.62	<6.01	283	119	92.4	527	604	230	175	<7.68	--	--	--	-4	<0.100
W-29	4	2/25/22	<6.78	<5.37	<3.97	<3.96	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	145	155	46.0	116.8	12.7	5.56	6.81	<7.68	0.235	4.11	12.0	-6	<0.100
W-30	4	2/25/22	<6.78	<5.37	<3.97	<3.96	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	34.0	38.2	138	213	27.7	21.9	29.7	<7.68	26.8	<0.100	5.12	-4	<0.100
W-32	4	2/24/22	<6.78	<5.37	<3.97	<3.96	<2.56	<2.64	<2.07	<3.97	<4.05	9.29	<6.01	111	335	117	214	204	137	10.4	<7.68	5.23	<0.100	14.7	-4	<0.100
W-34	4	2/24/22	<67.8	103	44.8	109	97.3	188	<20.7	277	1,780	<46.2	<60.1	271	162	124	<43.4	<49.2	<49.2	<52.4	<76.8	25.7	4.76	10.6	-16	<0.150
W-35	4	2/24/22	<6.78	<5.37	<3.97	<3.96	<2.56	13.7	<2.07	<3.97	<4.05	<4.62	<6.01	16.9	58.6	9.16	28.6	5.46	<4.92	<5.24	<7.68	<0.100	0.839	21.5	-6	<0.100
W-36	2.5	2/24/22	<6.78	<5.37	<3.97	<3.96	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	10.4	57.7	5.60	13.5	<4.92	<4.92	<5.24	<7.68	1.38	0.595	14.7	-3	<0.100
W-37	4	2/25/22	<6.78	<5.37	<3.97	<3.96	<2.56	<2.64	<2.07	<3.97	<4.05	<4.62	<6.01	10.4	38.7	6.12	<4.34	<4.92	<4.92	<5.24	<7.68	6.32	0.869	5.44	-3	<0.100
Tier 1 ESL			15	16	280	2,800	0.32	350,000	3,100	2,400	3.6	9.4	--	3.2	10,000	37	3,500	--	--	2.8	0.16	--	--	--	--	--
Commercial ESL			67	100	1,200	12,000	5.2	1,500,000	13,000	10,000	16	41	--	14.0	44,000	160	15,000	--	--	12	0.68	--	--	--	--	--
Tier 2 ESL - Garage Visitor			--	--	--	--	--	--	--	--	--	--	--	112	--	1,280	--	--	--	96	--	--	--	--	--	--
LTCP - No bioattenuation			--	--	--	--	--	--	--	--	--	--	--	280	--	3,600	--	--	--	310	--	--	--	< 4.0	--	--
LTCP - Bioattenuation zone			--	--	--	--	--	--	--	--	--	--	--	280000	--	360,000	--	--	--	310000	--	--	--	> 4.0	--	--
Remedial Goal			--	100	--	--	5.2	--	--	--	16	--	--	280000	--	360000	--	--	--	310000	--	--	--	--		--

Notes:

VOCs: Volatile Organic Compounds

DBA: Dibromoethane

PCE: Tetrachloroethene

CA: Chloroethane

TCE: Tichloroethene

DCA: Dichloroethane

DCE: Dichloroethene

DCP: Dichloropropane

CE: Chloroethene

DCB: Dichlorobenzene

µg/m³: micrograms per cubic meter

TMB: Trimethylbenzene

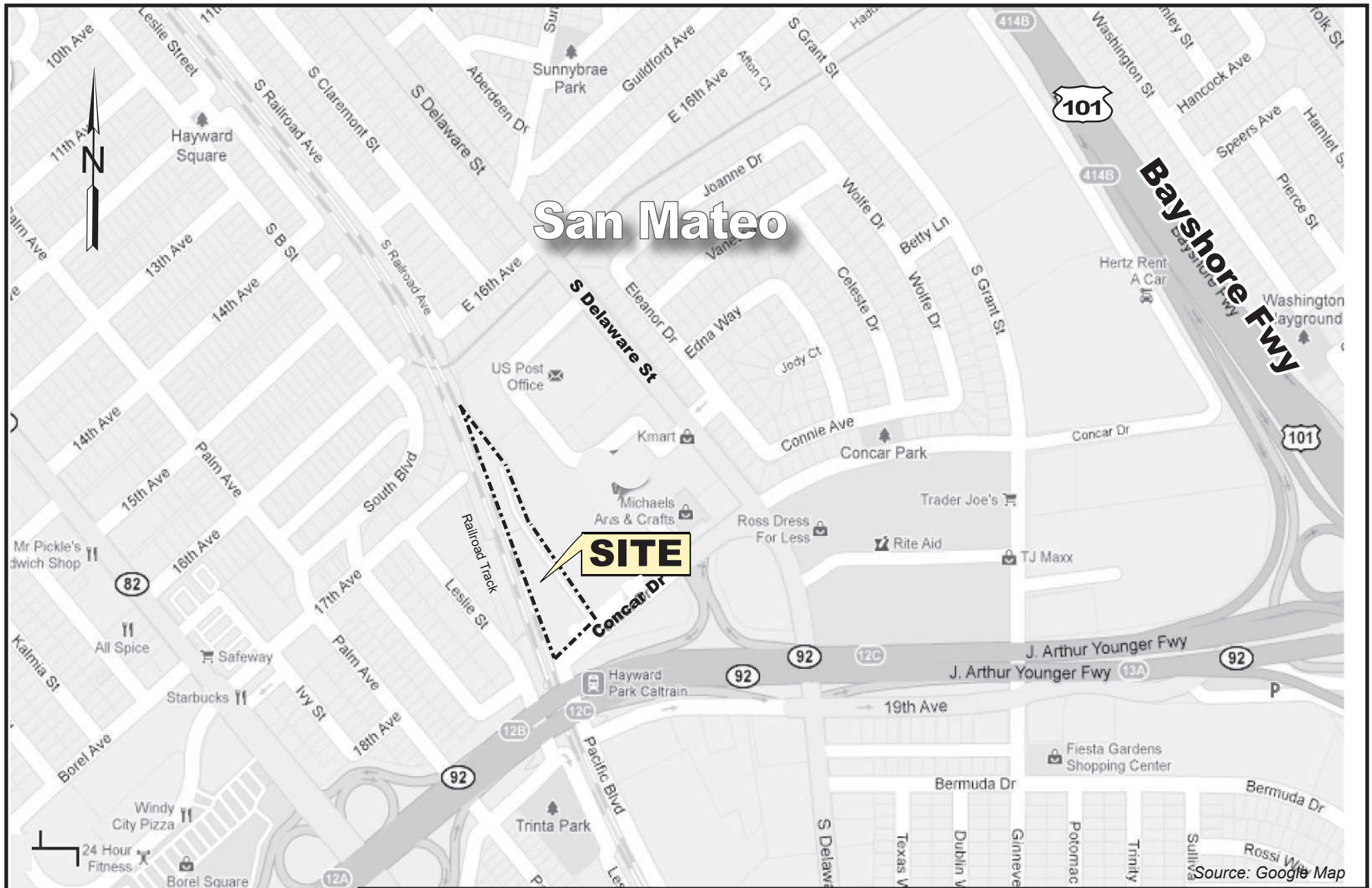
<6.78: Less than the laboratory-reporting limit of 6.78

--: Not available

ESLs: California Regional Water Quality Control Board - San Francisco Bay Region Environmental Screening Levels (ESLs), February 2019, Rev.2

LTCP: Water Quality Control Policy for Low-Threat Underground Storage Tank (UST) Case Closure, 2012.

## FIGURES



Source: Google Map

0 FEET 500

Figure 1-1

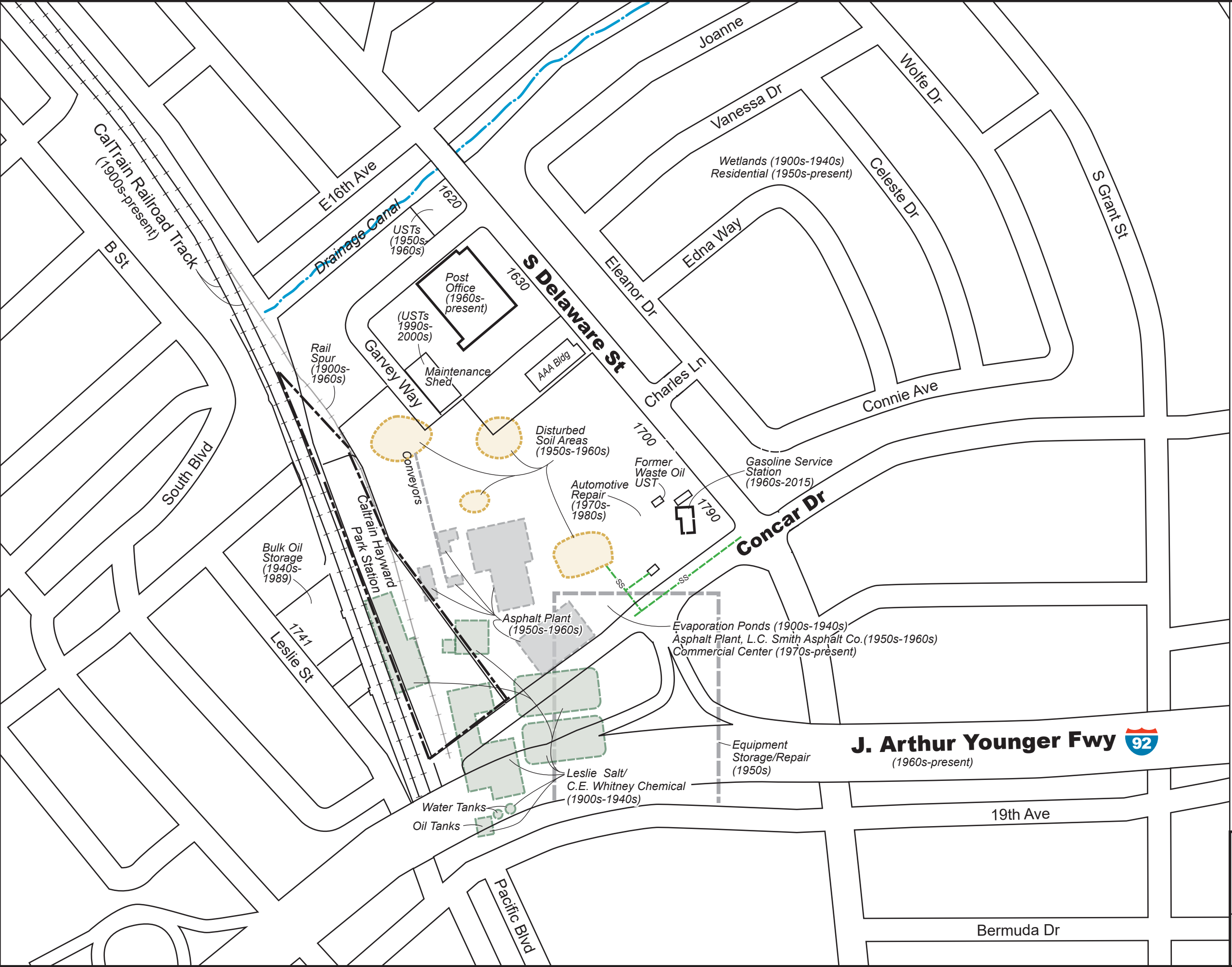
## SITE LOCATION MAP

May 2022

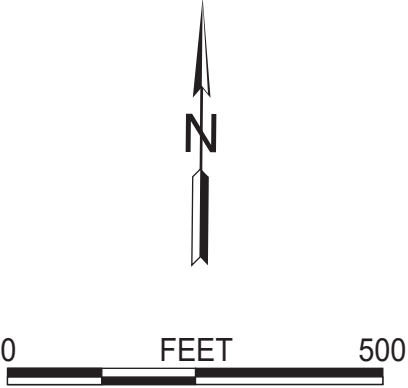
Hayward Park Caltrain Station, San Mateo, California

**WEST**  
Environmental Services & Technology





EXPLANATION  
- - - Site boundary line



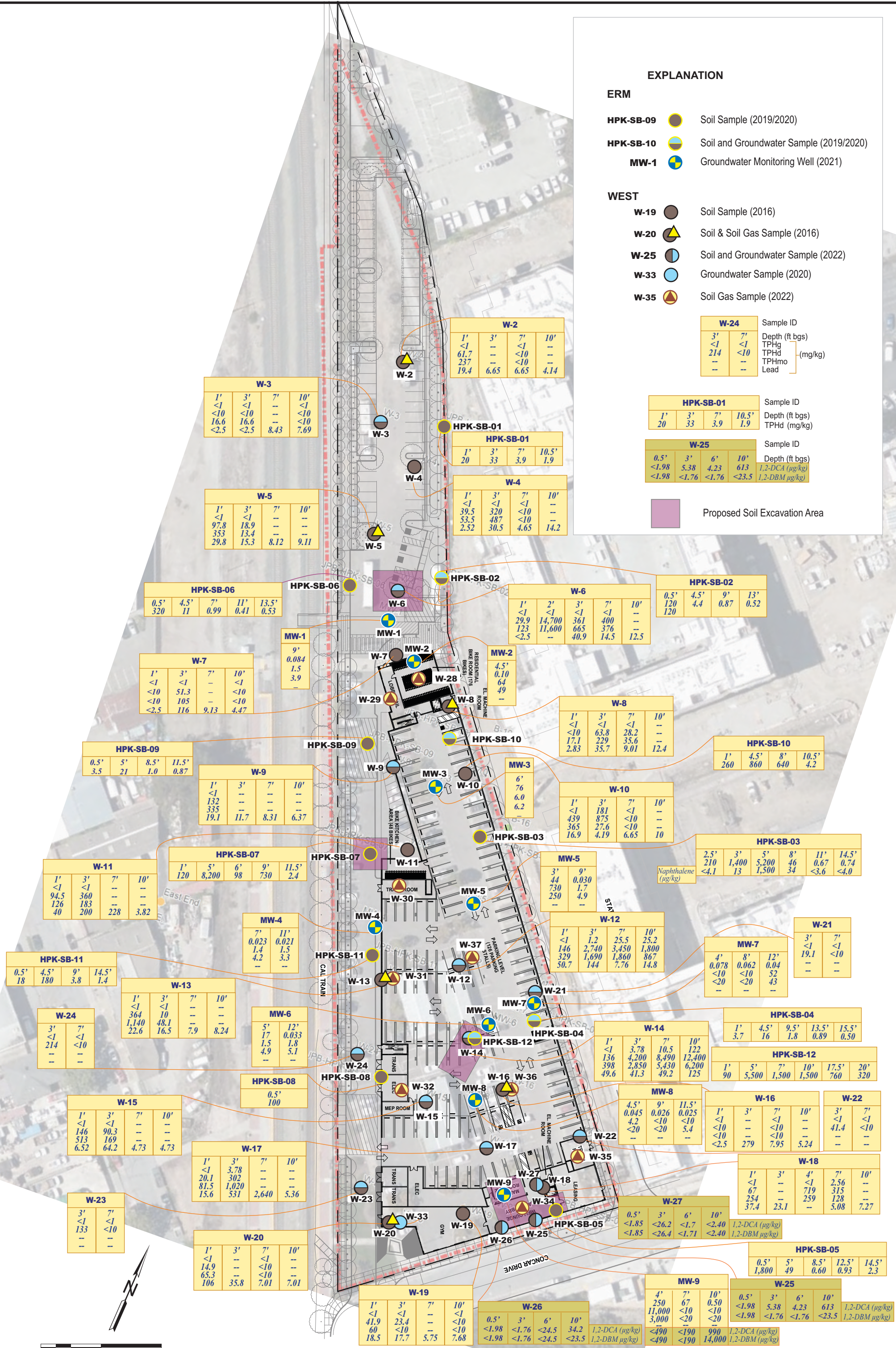
**SITE LAYOUT**

Hayward Park Caltrain  
San Mateo, California



Figure 1-2  
May 2022





0 25 50 100 feet



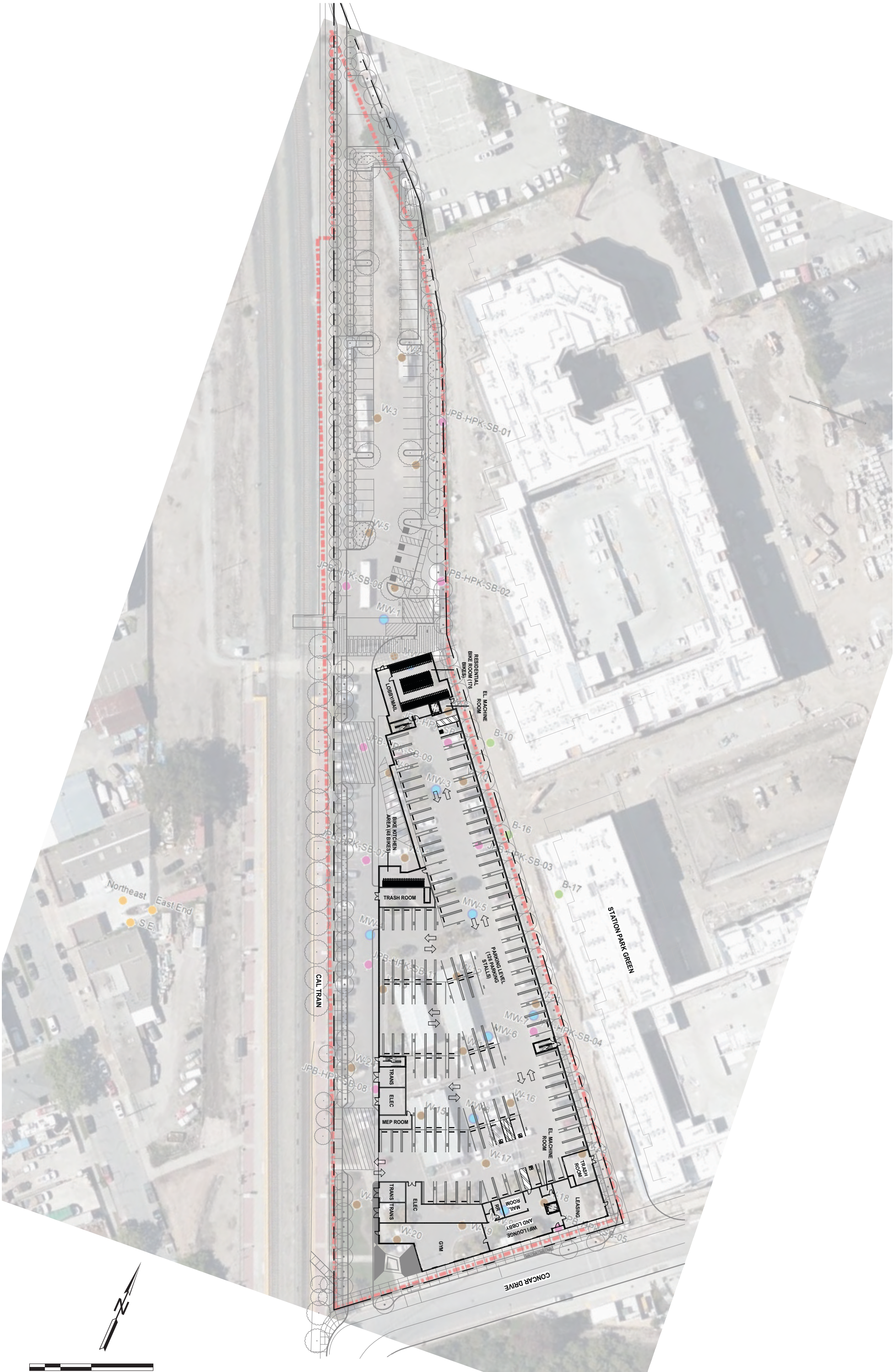


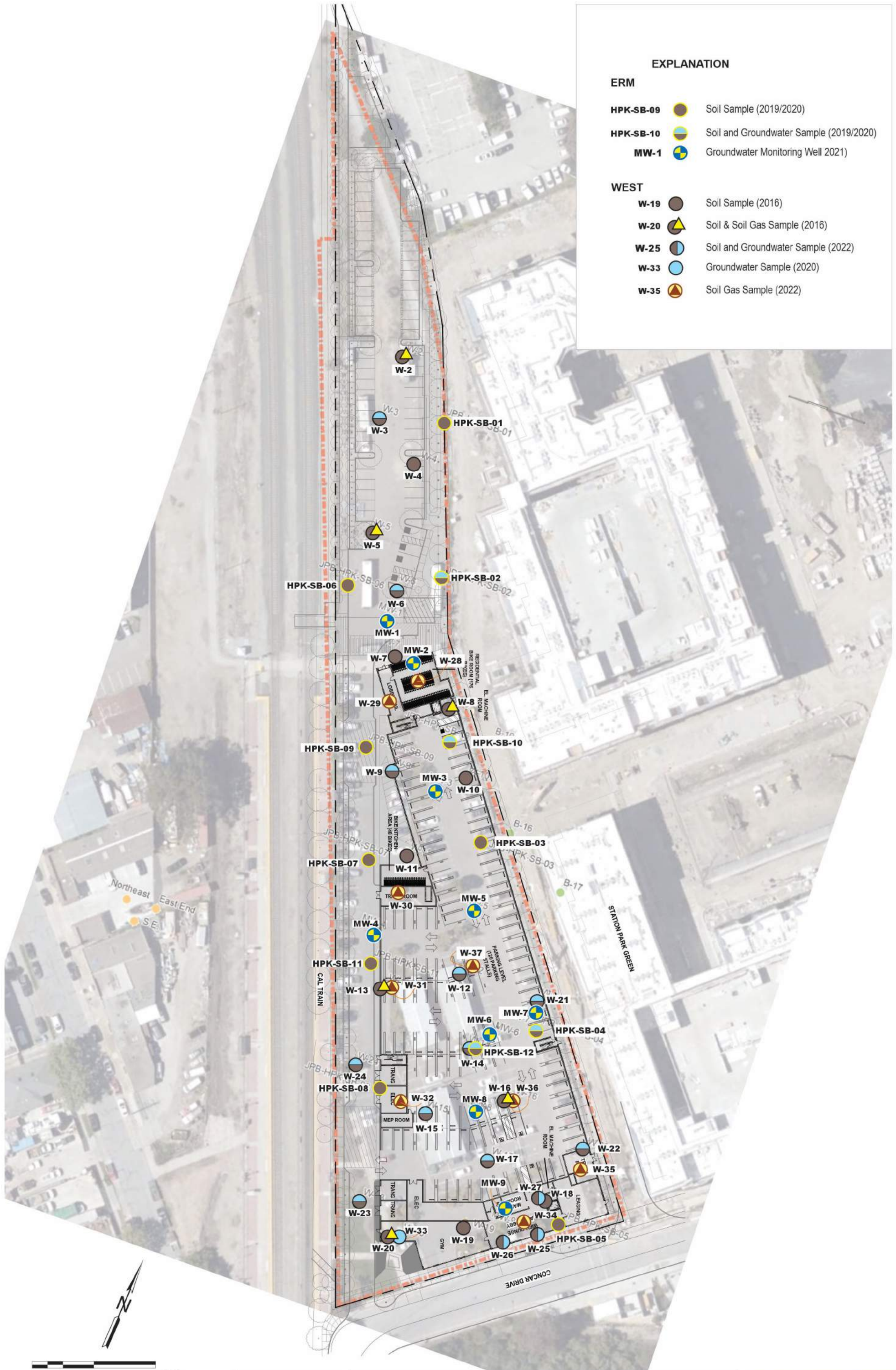
Figure 2-1

May 2022

**SITE DEVELOPMENT AREA**

Hayward Park Station, San Mateo, California





EXPLANATION

ERM

HPK-SB-09

Soil Sample (2019/2020)

HPK-SB-10

Soil and Groundwater Sample (2019/2020)

MW-1

Groundwater Monitoring Well (2021)

WEST

W-19

Soil Sample (2016)

W-20

Soil & Soil Gas Sample (2016)

W-25

Soil and Groundwater Sample (2022)

W-33

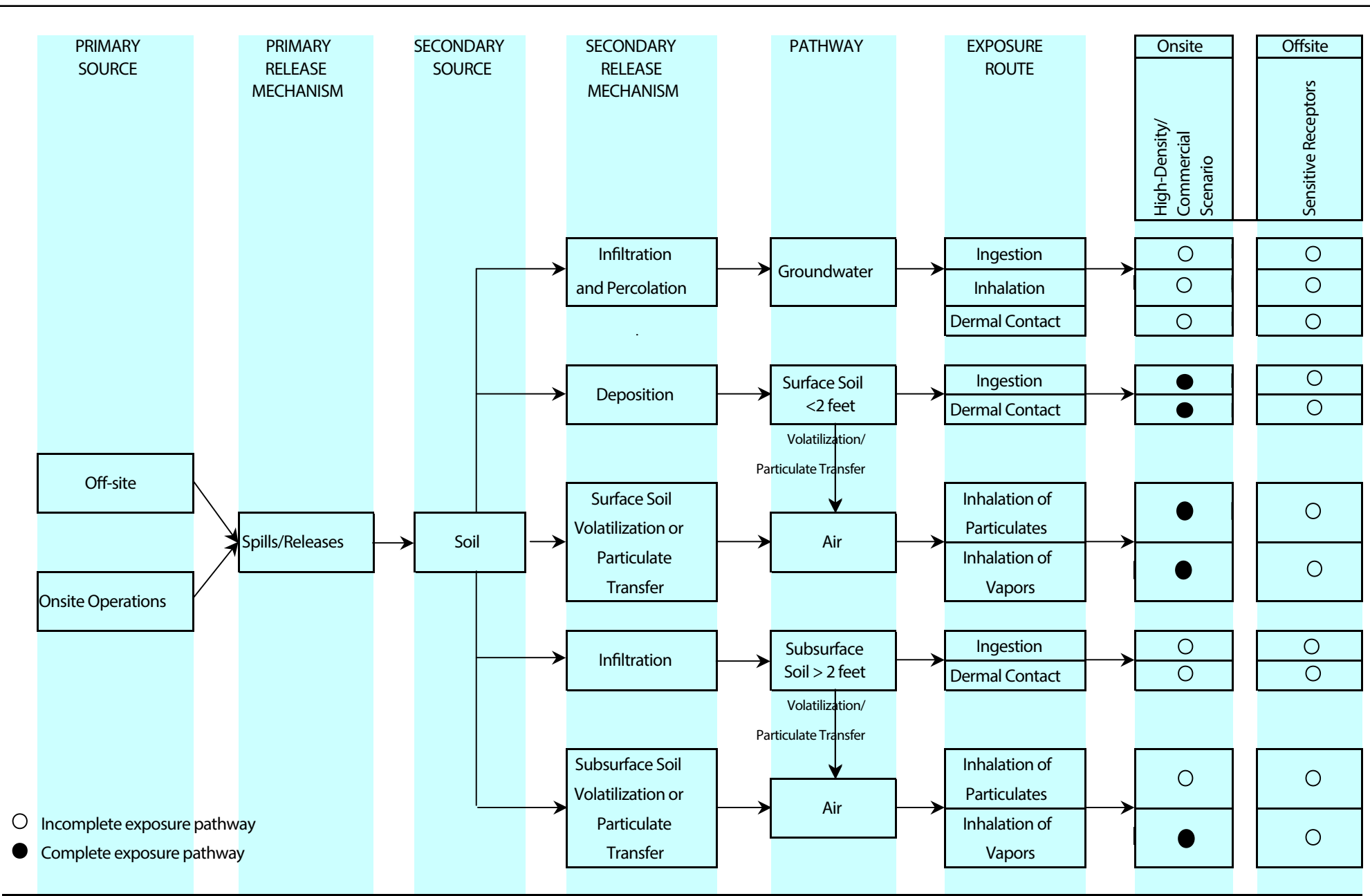
Groundwater Sample (2020)

W-35

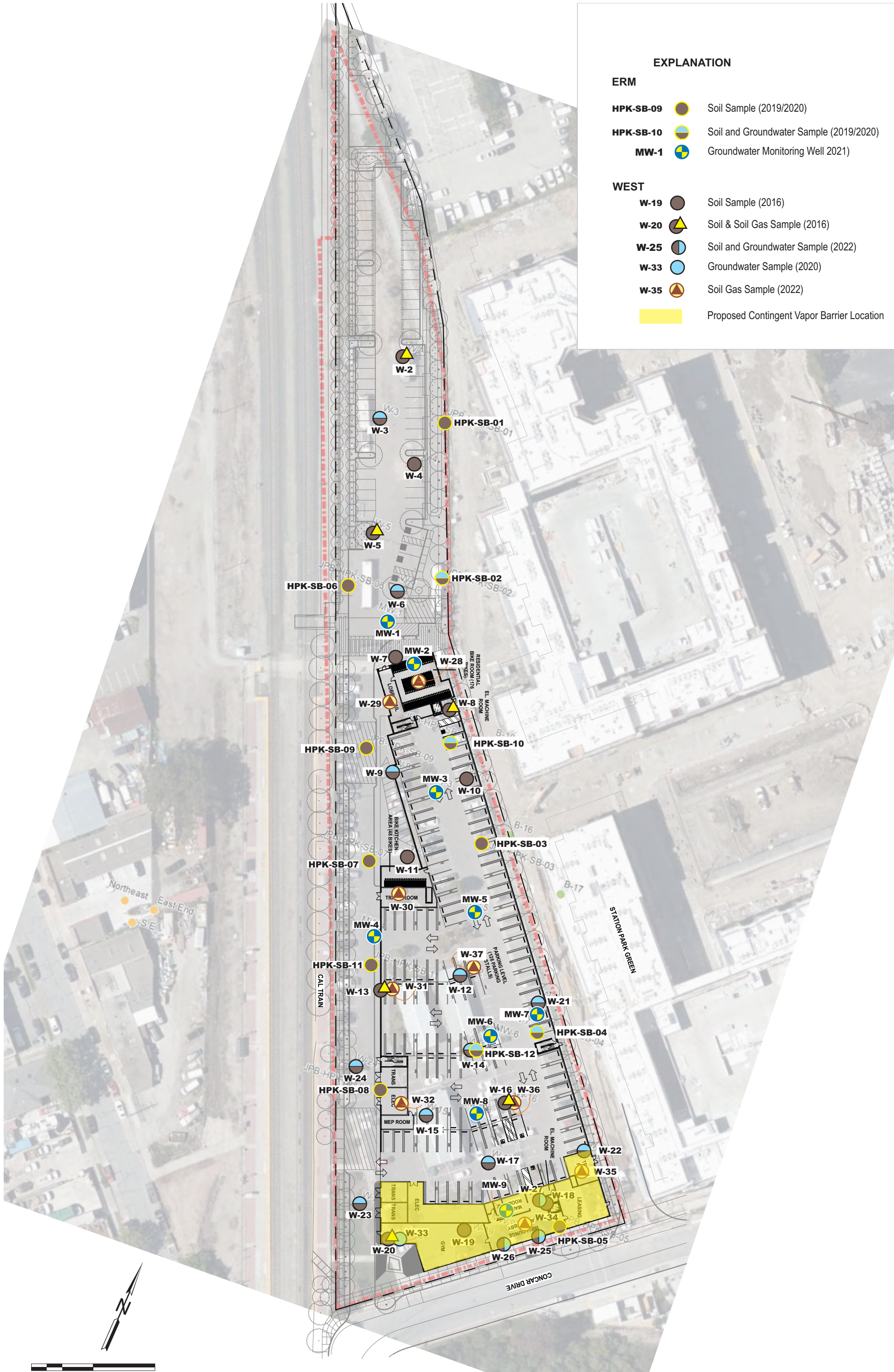
Soil Gas Sample (2022)

0 25 50 100 feet

Figure 3-1	<b>SITE DETAIL AND SAMPLING LOCATIONS</b>
May 2022	Hayward Park Station, San Mateo, California







EXPLANATION

ERM

HPK-SB-09

Soil Sample (2019/2020)

HPK-SB-10

Soil and Groundwater Sample (2019/2020)

MW-1

Groundwater Monitoring Well (2021)

WEST

W-19

Soil Sample (2016)

W-20

Soil & Soil Gas Sample (2016)

W-25

Soil and Groundwater Sample (2022)

W-33

Groundwater Sample (2020)

W-35

Soil Gas Sample (2022)

Proposed Contingent Vapor Barrier Location

0 25 50 100 feet

Figure 5-1

May 2022

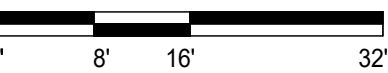
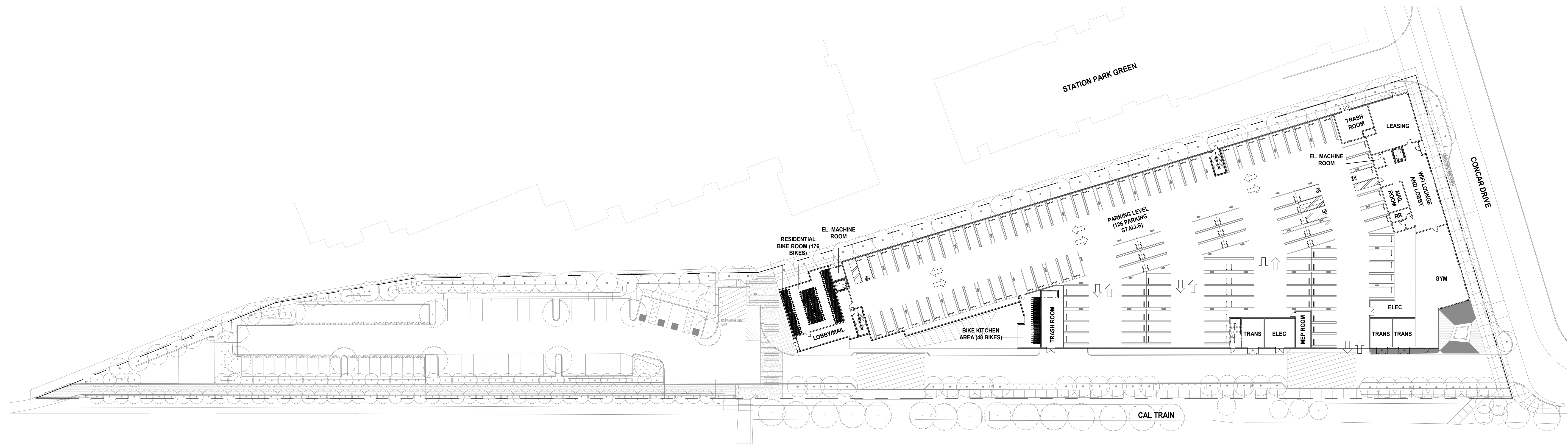
CONTINGENT VAPOR BARRIER LOCATION

Hayward Park Station, San Mateo, California

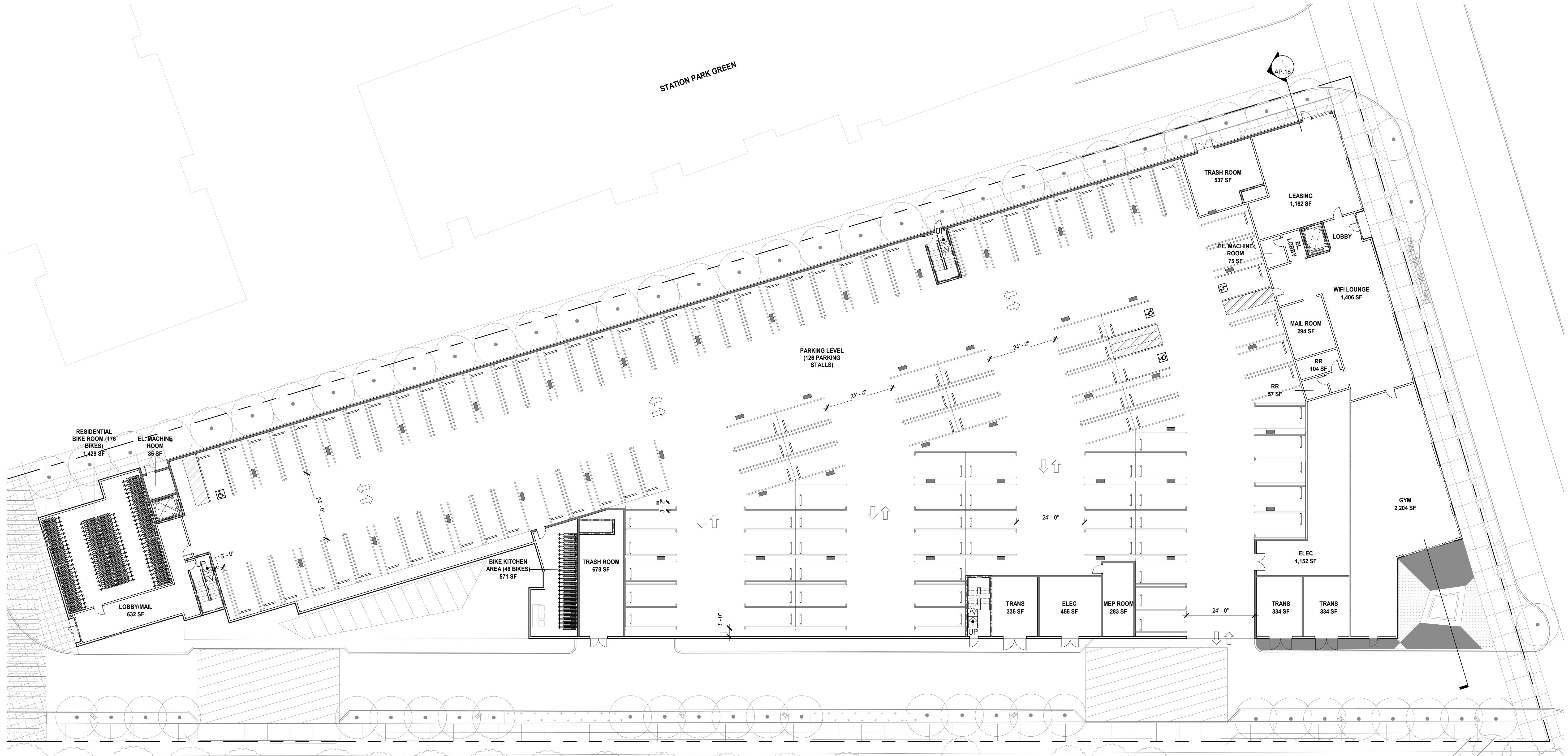


## **APPENDIX A**

### **SELECTED DEVELOPMENT PLANS**







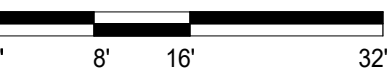






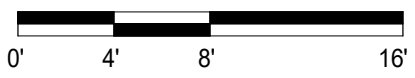
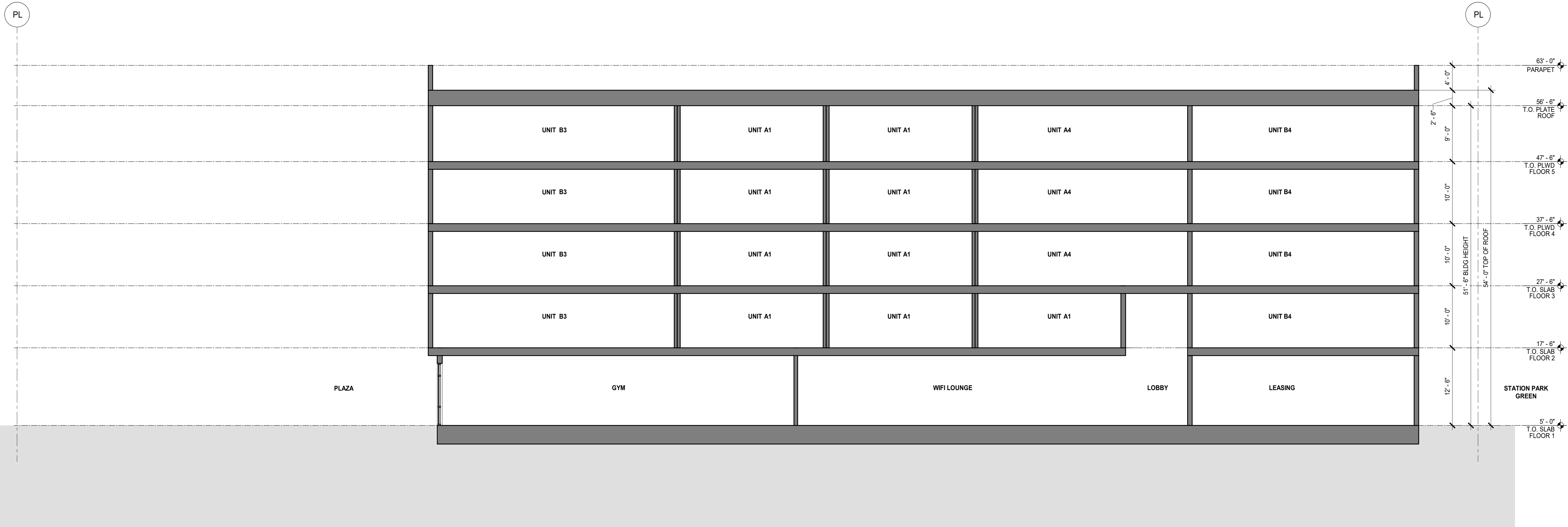












## **APPENDIX B**

### **BORING LOGS**



**Client:** WEST  
**Project:** Regis.HaywardPark  
**Address:** 401 Concar Dr., San Mateo, CA

**BORING LOG**  
**Well No.** W-25  
**Page:** 1 of 1

**Drilling Start Date:** 02/23/2022 09:40  
**Drilling End Date:** 02/23/2022 10:00  
**Drilling Company:** ECA  
**Drilling Method:** Direct Push  
**Drilling Equipment:** Macrocore  
**Permit No.:** SMCH EHS # 22-0239  
**Logged By:** Aaron Kalter (WEST)

**Boring Depth (ft):** 12.0  
**Boring Diameter (in):** 2.25  
**Sampling Method(s):** Direct Push  
**DTW During Drilling (ft):** 10.0  
**DTW After Drilling (ft):** 1.7 (12:31 PM)  
**Ground Surface Elev. (ft):** N/A  
**Location (Lat, Long):** 37.55294, -122.30870

**Well Depth (ft):** 12.0  
**Well Diameter (in):** 1.0  
**Screen Slot (in):** 0.010  
**Riser Material:** Sch 40 PVC  
**Screen Material:** Temporary Prepack (7-12-ft)  
**Well Screen removed following sampling:** Yes  
**Boring Backfill:** Cement Grout (Ratio 47 pounds cement: 3 gallons water)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	TEMPORARY WELL	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0								(0') Asphalt			0
				W-25-0.5 Soil	09:40	0-1	1.00	(0.5') Well-graded SAND with gravel (SW); mostly fine-coarse grained sand, little coarse gravel, few silt, loose, moist, brown (10YR 5/3)	0		
						1-4	3.00		0		
				W-25-3 Soil	09:55				0		
5				W-25-6 Soil	10:02	4-8	4.00	(5') Clayey SAND (SC); fine-medium grained, little clay, poorly graded, medium dense, moist, very dark gray (10YR 3/1)	0.1		5
								(7') Color change to Dark Gray, 2.5Y 4/1	0		
						8-10	2.00		0		
10				W-25-10 Soil	10:17	10-12	2.00	(10') Poorly graded SAND (SP); medium-coarse grained, medium dense, wet, yellowish brown (10YR 5/6)	0		10
				W-25-12 GW	11:54				0		
								(12') Boring terminated			
15											15
20											20

NOTES: Hole precleared by ECA using hand auger. Water sample W-25-12 collected at 7.0-12.0ft bgs.



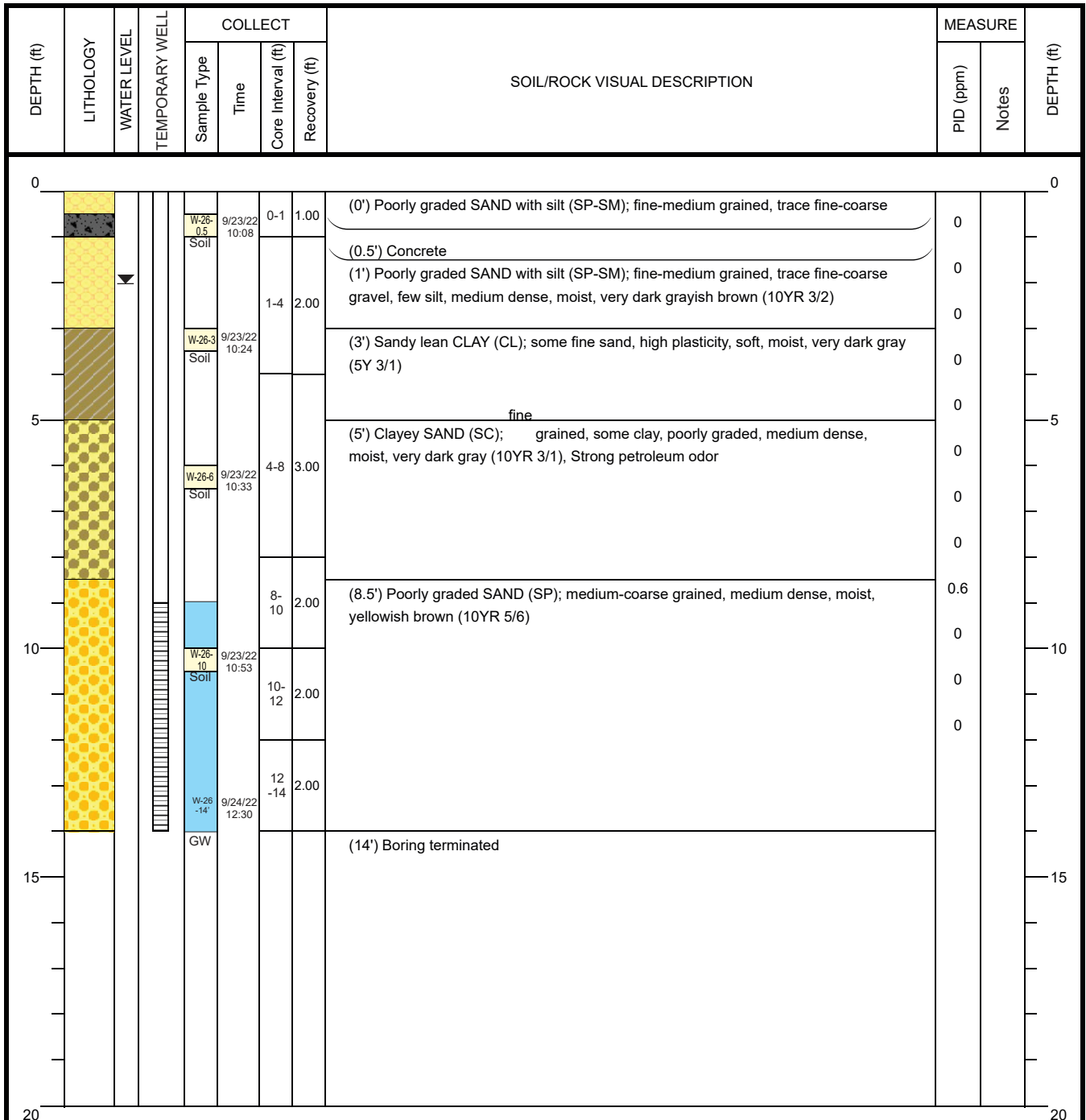
Client: WEST  
Project: Regis.HaywardPark  
Address: 401 Concar Dr., San Mateo, CA

BORING LOG  
Well No. W-26  
Page: 1 of 1

Drilling Start Date: 02/23/2022 10:00  
Drilling End Date: 02/24/2022 15:15  
Drilling Company: ECA  
Drilling Method: Direct Push  
Drilling Equipment: Macrocore  
Permit No.: SMCH EHS # 22-0239  
Logged By: Aaron Kalter (WEST)

Boring Depth (ft): 14.0  
Boring Diameter (in): 2.25  
Sampling Method(s): Direct Push  
DTW During Drilling (ft): N/A  
DTW After Drilling (ft): 2.1 (12:28 PM)  
Ground Surface Elev. (ft): N/A  
Location (Lat, Long): 37.55289, -122.30877

Well Depth (ft): 14.0  
Well Diameter (in): 1.0  
Screen Slot (in): 0.010  
Riser Material: Sch 40 PVC  
Screen Material: Temporary Prepack (9-14-ft)  
Well Screen removed following sampling: Yes  
Boring Backfill: Cement Grout (Ratio 47 pounds cement: 3 gallons water)



NOTES: Hole precleared by ECA using hand auger. Water sample W-26-14 collected at 9.0-14.0 ft bgs.



**Client:** WEST  
**Project:** Regis.HaywardPark  
**Address:** 401 Concar Dr., San Mateo, CA

**BORING LOG**  
**Well No.** W-27  
**Page:** 1 of 1

**Drilling Start Date:** 02/23/2022 08:20  
**Drilling End Date:** 02/23/2022 09:35  
**Drilling Company:** ECA  
**Drilling Method:** Direct Push  
**Drilling Equipment:** Macrocore  
**Permit No.:** SMCH EHS # 22-0239  
**Logged By:** Aaron Kalter (WEST)

**Boring Depth (ft):** 12.0  
**Boring Diameter (in):** 2.25  
**Sampling Method(s):** Direct Push  
**DTW During Drilling (ft):** 3.75  
**DTW After Drilling (ft):** 3.0 (12:30 PM)  
**Ground Surface Elev. (ft):** N/A  
**Location (Lat, Long):** 37.55299, -122.30877

**Well Depth (ft):** 12.0  
**Well Diameter (in):** 1.0  
**Screen Slot (in):** 0.010  
**Riser Material:** Sch 40 PVC  
**Screen Material:** Temporary Prepack (7-12-ft)  
**Well Screen removed following sampling:** YES  
**Boring Backfill:** Cement Grout (Ratio 47 pounds cement: 3 gallons water)

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0						0 -1.5	1.50	(0') Asphalt (0.5') Concrete			0
						1.5 -4	2.50	(1.5') Poorly graded SAND with silt (SP-SM); fine-medium grained, trace fine-coarse gravel, few silt, medium dense, moist, very dark grayish brown (10YR 3/2)	0		0
				W-27-3 Soil	09:00						
				W-27-4 Soil	09:10			(3.5') Becomes saturated with asphalt/petroleum substance at 3.75 feet bgs	0.1		
5				W-27-6 Soil	09:20	4-8	3.00	(5') Clayey SAND (SC); fine grained, some clay, poorly graded, loose, wet, very dark gray (10YR 3/1)	0		5
								(7') Color change to Dark Gray, 2.5Y 4/1	0.2		
									0		
									0		
10				W-27-10 Soil	09:30	8-12	2.00	(9.5') Poorly graded SAND (SP); medium-coarse grained, medium dense, wet, yellowish brown (10YR 5/6)	0		10
				W-27-12' GW	09:35				0.1		
								(12') Boring terminated	0		
20											20

NOTES: Hole precleared by ECA using hand auger. Water sample W-27-12 collected at 7.0-12.0 ft bgs.





Client: **WEST**  
 Project: **Regis.HaywardPark**  
 Address: **401 Concar Dr., San Mateo, CA**

TEMPORARY VAPOR PROBE LOG  
 Well No. **W-28**  
 Page: **1 of 1**

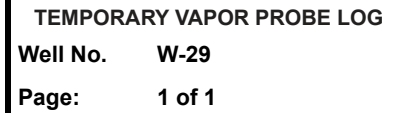
Drilling Start Date: **02/23/2022 14:30**  
 Drilling End Date: **02/23/2022 14:35**  
 Drilling Company: **ECA**  
 Drilling Method: **Direct Push**  
 Drilling Equipment: **Macrocore**  
 Permit No.: **Not Required**  
 Logged By: **Aaron Kalter (WEST)**

Boring Depth (ft): **4.5**  
 Boring Diameter (in): **2.25**  
 Sampling Method(s): **Direct Push**  
 DTW During Drilling (ft): **N/A**  
 DTW After Drilling (ft): **N/A**  
 Ground Surface Elev. (ft): **N/A**  
 Location (Lat, Long): **37.55408, -122.30956**

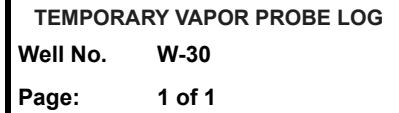
Well Depth (ft): **4.0**  
 Well Diameter (in): **2.25**  
 Screen Slot (in): **0.006**  
 Riser Material: **Teflon (0.25-inch diameter)**  
 Screen Material: **Six-inch stainless steel**  
 Seal Material(s): **Dry and hydrated bentonite**  
 Filter Pack: **#3 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0						0.5	0.5	(0') Asphalt			0
						0.5	1.00	(0.5') Poorly graded SAND (SP); medium-coarse grained, trace fine gravel, loose, moist, brown (7.5YR 4/2)	0		0
						1.5	0.00	(1.5') No Recovery			
						2.5	1.75	(2.5') Poorly graded SAND with silt (SP-SM); fine-medium grained, few silt, medium dense, moist, very dark gray (10YR 3/1)	0		
						4.5		(4.5') Boring terminated	0		
5											5
10											10
15											15
20											20

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement

[illegible]

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement

[illegible]

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement



Client: WEST  
Project: Regis.HaywardPark  
Address: 401 Concar Dr., San Mateo, CA

TEMPORARY VAPOR PROBE LOG  
Well No. W-32  
Page: 1 of 1

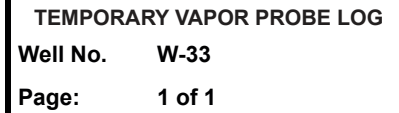
Drilling Start Date: 02/23/2022 12:10  
Drilling End Date: 02/23/2022 12:33  
Drilling Company: ECA  
Drilling Method: Direct Push  
Drilling Equipment: Macrocore  
Permit No.: Not Required  
Logged By: Aaron Kalter (WEST)

Boring Depth (ft): 4.5  
Boring Diameter (in): 2.25  
Sampling Method(s): Direct Push  
DTW During Drilling (ft): N/A  
DTW After Drilling (ft): N/A  
Ground Surface Elev. (ft): N/A  
Location (Lat, Long): 37.55313, -122.30919

Well Depth (ft): 4.0  
Well Diameter (in): 2.25  
Screen Slot (in): 0.006  
Riser Material: Teflon (0.25-inch diameter)  
Screen Material: Six-inch stainless steel  
Seal Material(s): Dry and hydrated bentonite  
Filter Pack: #3 Sand

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0						0-1.5	1.50	(0') Poorly graded SAND with gravel (SP); medium-coarse grained, some fine gravel, trace silt, loose, moist, brown (10YR 5/3)	0		0
						1.5-2.5	0.50	(1.5') Concrete	0.1		
						2.0-4.5	2.50	(2') Poorly graded SAND with silt (SP-SM); fine grained, few silt, medium dense, moist, very dark gray (2.5Y 3/1)	0		
5								(4.5') Boring terminated	0		
10											10
15											15
20											20

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement



NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement



Client: **WEST**  
 Project: **Regis.HaywardPark**  
 Address: **401 Concar Dr., San Mateo, CA**

TEMPORARY VAPOR PROBE LOG  
 Well No. **W-34**  
 Page: **1 of 1**

Drilling Start Date: **02/23/2022 11:00**  
 Drilling End Date: **02/23/2022 11:15**  
 Drilling Company: **ECA**  
 Drilling Method: **Direct Push**  
 Drilling Equipment: **Macrocore**  
 Permit No.: **Not Required**  
 Logged By: **Aaron Kalter (WEST)**

Boring Depth (ft): **4.5**  
 Boring Diameter (in): **2.25**  
 Sampling Method(s): **Direct Push**  
 DTW During Drilling (ft): **N/A**  
 DTW After Drilling (ft): **N/A**  
 Ground Surface Elev. (ft): **N/A**  
 Location (Lat, Long): **37.55294, -122.30881**

Well Depth (ft): **4.0**  
 Well Diameter (in): **2.25**  
 Screen Slot (in): **0.006**  
 Riser Material: **Teflon (0.25-inch diameter)**  
 Screen Material: **Six-inch stainless steel**  
 Seal Material(s): **Dry and hydrated bentonite**  
 Filter Pack: **#3 Sand**

DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0					2/24/22 11:15	0.0 -1.5	1.5	(0') Asphalt	0.6 0.1 0.3 1.6		0
								(0.5') Concrete			
						1.5 -4.0	1.88	(1.5') Poorly graded SAND with silt (SP-SM); fine-medium grained, few fine gravel, little silt, dense, moist, very dark grayish brown (10YR 3/2)			
						4.0- 4.5	0.50	(4.5') Boring terminated			
5											5
10											10
15											15
20											20

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement



**Client:** WEST  
**Project:** Regis.HaywardPark  
**Address:** 401 Concar Dr., San Mateo, CA

**TEMPORARY VAPOR PROBE LOG**  
**Well No.** W-35  
**Page:** 1 of 1

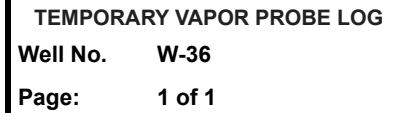
**Drilling Start Date:** 02/23/2022 11:20  
**Drilling End Date:** 02/23/2022 11:34  
**Drilling Company:** ECA  
**Drilling Method:** Direct Push  
**Drilling Equipment:** Macrocore  
**Permit No.:** Not Required  
**Logged By:** Aaron Kalter (WEST)

**Boring Depth (ft):** 4.5  
**Boring Diameter (in):** 2.25  
**Sampling Method(s):** Direct Push  
**DTW During Drilling (ft):** N/A  
**DTW After Drilling (ft):** N/A  
**Ground Surface Elev. (ft):** N/A  
**Location (Lat, Long):** 37.55313, -122.30861

**Well Depth (ft):** 4.0  
**Well Diameter (in):** 2.25  
**Screen Slot (in):** 0.006  
**Riser Material:** Teflon (0.25-inch diameter)  
**Screen Material:** Six-inch stainless steel  
**Seal Material(s):** Dry and hydrated bentonite  
**Filter Pack:** #3 Sand

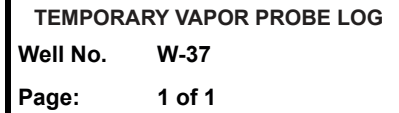
DEPTH (ft)	LITHOLOGY	WATER LEVEL	WELL COMPLETION	COLLECT				SOIL/ROCK VISUAL DESCRIPTION	MEASURE		DEPTH (ft)
				Sample Type	Time	Core Interval (ft)	Recovery (ft)		PID (ppm)	Notes	
0								(0') Asphalt			0
						0.5 -4.0	4.00	(0.5') Poorly graded SAND (SP); fine-medium grained, few fine gravel, medium dense, dry, brown (10YR 5/3)	0		0
								(2') Poorly graded SAND with silt (SP-SM); fine-medium grained, few silt, dense, moist, brown (10YR 5/3)	0		0
								(3.5') Poorly graded SAND (SP); fine grained, medium dense, moist, dark olive gray (5Y 3/2)	0		0
5			SG (W -35 -4')		2/24/22 14:08			(4.5') Boring terminated			5
10											10
15											15
20											20

NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement



NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement





NOTES: Following soil vapor gas sampling, the tubing was removed and the boring annulus sealed with Portland Type II cement

## **APPENDIX C**

### **FIELD DATA FORMS**

# GROUNDWATER ELEVATION FIELD DATA SHEET

Project: Regis.Hayward Park Station

Location: 601 Concar Drive, San Mateo, California

Groundwater Sampling Date: February 23, 2022

Well ID	Date	Time	Well Depth	Well Casing Diameter	Screen Interval	Top of Casing Elevation	Depth to Water	Groundwater Elevation	Comments
		(24 hr)	(ft)	(in)	(ft bgs)	(ft msl)	(ft bTOC)	(ft msl)	
MW-1	2/23/22	0928	10	2	3-10	11.32	5.93	5.39	open 0.0ppm
MW-2	↑ 2/23/22 ↓	0905	10	2	3-10	11.15	5.10	<del>5.05</del> 6.05	clear out 6" H <sub>2</sub> O 0.0ppm
MW-3		0910	10	2	3-10	10.76	5.68	5.08	clear out 4" H <sub>2</sub> O 0.0ppm
MW-4		0915	12	2	3-12	12.23	5.01	7.22	0.0ppm
MW-5		0932	10	2	3-10	10.53	2.92	7.61	clear out 3" H <sub>2</sub> O 0.0ppm
MW-6		0924	13	2	3-12	10.16	5.80	4.36	clear 1" H <sub>2</sub> O 0.0ppm
MW-7		0921	12	2	3-12	9.69	6.13	3.56	0.0ppm
MW-8		0935	12	2	3-12	10.38	4.92	5.46	0.0ppm
MW-9		0940	10	2	3-10	10.44	5.21	5.23	0.0ppm

Notes:

ft bgs: feet below ground surface  
ft BTOC: feet below top-of-casing  
ft msl: feet above mean sea level

# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-1	SAMPLE ID: MW-1	DATE: 4/23/22	

## PURGING DATA

WELL DIAMETER (inches): 1	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 10 (ft bgs)	STATIC DEPTH TO WATER (feet): 5.93	DEPTH OF WELL (feet): 10.01 BTOC
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY		(only fill out if applicable)		
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME		(only fill out if applicable)		

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7			FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7			PURGING INITIATED AT: 1558		PURGING ENDED AT: 1619		TOTAL VOLUME PURGED (liters): 2.1		
TIME	VOLUME PURGED (liters)	PURGE RATE (L/min.)	DEPTH TO WATER (feet)	TEMP (°C)	pH (standard units)	EC (micro mhos/cm or µS/cm)	TURBIDITY (FTU)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% saturation	mg/L			
1600	0.2	0.1	6.12	15.4	7.32	9.47	0.00	8.5	0.79	57	no odor clear	None
1603	0.5	0.1	6.16	16.8	7.08	9.41	0.00	5.8	0.55	54	"	"
1606	0.8	0.1	6.18	17.1	7.02	9.39	0.00	5.5	0.51	52	"	"
1609	1.1	0.1	6.22	16.9	7.01	9.43	0.00	4.8	0.44	51	"	"
1612	1.4	0.1	6.26	16.8	7.02	9.46	0.00	4.5	0.41	50	"	"
1615	1.7	0.1	6.27	16.8	7.01	9.48	0.00	4.3	0.40	48	"	"
1618	2.0	0.1	6.29	16.8	7.01	9.49	0.00	4.2	0.39	47	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.08; 1" = 0.15; 1.25" = 0.23; 2" = 0.61; 3" = 0.14; 4" = 2.5; 6" = 3.9; 8" = 5.6; 12" = 22.3  
TUBING INSIDE DIA. CAPACITY (L/FT): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.051

## SAMPLING DATA

SAMPLED BY (PRINT): AFFILIATION: WEST Rebin Mock				SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 1620		SAMPLING ENDED AT: 1634	
PUMP OR TUBING DEPTH IN WELL (feet): 7				TUBING MATERIAL CODE: B		DUPLICATE: Y (N) Duplicate Sample ID: (N)			
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced)									
SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (L per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)				
MW-1	4	V	40 ml	HCl	N	VOCs (8260B); TPHG (8015M)	PE, PP	0.1	
MW-1	1	AG	1L	None	N	TPHd (8015M)	PE, PP	0.1	

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Bailor; C = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV

# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-2	SAMPLE ID: MW-2	DATE: 2/23/27	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.85	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 10 (ft bgs)	STATIC DEPTH TO WATER (feet): 8.0705	DEPTH OF WELL (feet): 9.86
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY		(only fill out if applicable)		
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME		(only fill out if applicable)		
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGING INITIATED AT: 1024	PURGING ENDED AT: 1044	TOTAL VOLUME PURGED (liters): 2

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TEMP. (°C)	pH (standard units)	EC (microhm/cm or µS/cm)	TURBIDITY (FTU)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% saturation	mg/L			
1024	0	0.1	5.49	18.9	7.25	8.99	0.00	13.4	1.21	12	clear	none
1027	0.3	0.1	5.49	18.2	7.23	8.95	0.00	10.8	0.01	-8	"	"
1030	0.6	0.1	5.54	17.9	7.26	8.94	0.80	9.8	0.91	-18	tan clear	"
1033	0.9	0.1	5.55	17.8	7.24	8.95	3.43	8.0	0.74	-37	"	"
1036	1.2	0.1	5.57	17.8	7.25	8.95	2.74	7.4	0.69	-39	"	"
1039	1.5	0.1	5.59	17.8	7.25	8.96	2.60	7.2	0.67	-41	"	"
1042	1.8	0.1	5.62	17.8	7.25	8.97	2.26	7.2	0.66	-42	"	"

WELL CAPACITY (Liters Per Foot): 0.78" = 0.08; 1" = 0.15; 1.25" = 0.23; 2" = 0.61; 3" = 0.14; 4" = 2.5; 5" = 3.8; 6" = 5.6; 12" = 22.3  
 TUBING INSIDE DIA. CAPACITY (L/FT): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.061

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robina Mack				SAMPLER(S) SIGNATURE(S): [Signature]		SAMPLING INITIATED AT: 1045		SAMPLING ENDED AT: 1057	
PUMP OR TUBING DEPTH IN WELL (feet): 7				TUBING MATERIAL CODE: PE		DUPLICATE: Y <input checked="" type="radio"/> N <input type="radio"/> Duplicate Sample ID:			
FIELD DECONTAMINATION: PUMP Y <input checked="" type="radio"/> TUBING Y <input checked="" type="radio"/> (replaced)									

SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (L per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)			
MW-2	4	V	40 ml	HCl	N	VOCs (8260B); TPHG (8015M)	PE, PP	0.1
MW-2	1	AG	1L	None	N	TPHd (8015M)	PE, PP	0.1

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; B = Bailer; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Bailer; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV



# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-3	SAMPLE ID: MW-3	DATE: 2/23/22 & 2/24/22	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 10 (ft bgs)	STATIC DEPTH TO WATER (feet): 5.60	DEPTH OF WELL (feet): 10.03 BTOC
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable) = 10 feet - 5.60 feet X 2.65 liters/foot = 2.65 liters X 3 = 7.95				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = _____ liters + ( _____ liters/foot X _____ feet ) + _____ liters = _____ liters				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8.5	PURGING INITIATED AT: 1119	PURGING ENDED AT: 1153	TOTAL VOLUME PURGED (liters): 8.0

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min.)	DEPTH TO WATER (feet)	TEMP. (°C)	PH (standard units)	EC (microhm/cm or µS/cm)	TURBIDITY (FTUs)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% saturation	mg/L			
1121	0.2	0.1	5.90	14.9	7.52	9.67	0.60	15.6	1.48	-2	clear	none
1124	0.5	0.1	6.09	15.3	7.47	9.54	0.00	10.2	1.02	-19	"	"
1127	0.8	0.1	6.28	15.5	7.44	9.52	0.00	9.0	0.81	-30	"	"
1130	1.1	0.1	6.36	15.4	7.35	9.55	0.60	7.2	0.74	-50	"	"
1133	2.0	0.3	6.90	15.5	7.31	9.54	0.91	6.3	0.63	-55	"	"
1136	2.9	0.3	7.19	15.6	7.30	9.58	1.00	5.3	0.50	-62	slats	"
1139	3.8	0.3	7.40	15.8	7.31	9.58	0.72	4.9	0.45	-68	"	"
1142	4.7	0.3	7.52	15.9	7.29	9.55	0.00	4.5	0.42	-68	"	"
1145	5.6	0.3	7.69	15.7	7.30	9.56	0.00	4.4	0.41	-69	"	"
1148	6.5	0.3	7.90	15.8	7.30	9.54	0.00	4.2	0.39	-70	"	"
1151	7.4	0.3	8.20	15.8	7.29	9.53	0.00	4.1	0.38	-70	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.08; 1" = 0.15; 1.38" = 0.23; 2" = 0.41; 3" = 0.61; 4" = 0.8; 5" = 1.0; 6" = 1.2; 8" = 1.6; 10" = 2.1; 12" = 2.5  
TUBING INSIDE DIA. CAPACITY (L./FT.): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.061

1340 8.0 - 7.17 2/24/22 0800 DTW=6.10 BTOC  
1550 8.0 - 6.77 1104 " 6.05 BTOC

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robin Mack	SAMPLER(S) SIGNATURE(S): [Signature]	SAMPLING 2/24/22 INITIATED AT: 1105	SAMPLING 2/24/22 ENDED AT: 1118
PUMP OR TUBING DEPTH IN WELL (feet): 7	TUBING MATERIAL CODE: PE	DUPLICATE: Y (N) Duplicate Sample ID: _____	

FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N (replaced))
-----------------------------------	-------------------------

SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (L. per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)			
MW-3	4	V	40 ml	HCl	N	VOCs (8260B); TPHG (8015M)	PE, PP	0.1
MW-3	1	AG	1L	None	N	TPHd (8015M)	PE, PP	0.1

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Bailor; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV

## GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-4	SAMPLE ID: MW-4	DATE: 2/23/22	

## PURGING DATA

[illegible]

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST <i>Robin Mock</i>				SAMPLER(S) SIGNATURE(S) <i>[Signature]</i>		SAMPLING INITIATED AT: 1532		SAMPLING ENDED AT: 1344	
PUMP OR TUBING DEPTH IN WELL (feet): 8				TUBING MATERIAL CODE: RE		DUPLICATE: Y (N) Duplicate Sample ID:			
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)					
SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)				
MW-4	4	V	40 ml	HCl	N	VOCs (8280B); TPHG (8015M)		PE, PP	
MW-4	1	AG	1L	None	N	TPHd (8015M)		PE, PP	
REMARKS:									
MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Baller; O = Other (specify)									
Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV									



# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-5	SAMPLE ID: MW-5	DATE: 2/24/22 (sampling)	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 10 (ft bgs)	STATIC DEPTH TO WATER (feet): 2.92	DEPTH OF WELL (feet): 9.78
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY			WELL CAPACITY	
(only fill out if applicable)			liters/foot = _____ liters	
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME				
(only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGING INITIATED AT: 0824	PURGING ENDED AT: 0852	TOTAL VOLUME PURGED (liters): 28

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TEMP. (°C)	pH (standard units)	EC (microhm/cm or µS/cm)	TURBIDITY (FTUs)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	COOR (describe)
								% saturation	mg/L			
0826	0.2	0.1	3.22	14.7	7.91	9.81	4.44	9.8	0.92	-64	Yellow clear	Petrol
0829	0.5	0.1	3.25	15.4	7.80	9.70	2.00	8.5	0.80	-78	"	"
0832	0.9	0.1	3.27	15.6	7.76	9.66	1.88	7.2	0.66	-80	"	"
0835	1.1	0.1	3.30	15.9	7.73	9.60	1.40	6.2	0.58	-86	"	"
0838	1.4	0.1	3.31	16.2	7.73	9.55	1.22	6.8	0.54	-87	"	"
0841	1.7	0.1	3.33	16.6	7.72	9.50	1.00	5.4	0.50	-89	"	"
0844	2.0	0.1	3.35	16.8	7.71	9.48	0.55	5.2	0.48	-89	"	"
0847	2.3	0.1	3.35	16.9	7.71	9.46	0.46	5.1	0.47	-86	"	"
0850	2.6	0.1	3.39	16.9	7.70	9.45	0.39	5.1	0.46	-86	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.06; 1" = 0.15; 1.315" = 0.23; 2" = 0.61; 3" = 0.14; 4" = 2.5; 5" = 3.9; 6" = 5.6; 12" = 22.3  
TUBING INSIDE DIA. CAPACITY (L/FT): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.061

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robin Mock				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 0853		SAMPLING ENDED AT: 0907			
PUMP OR TUBING DEPTH IN WELL (feet): 7				TUBING MATERIAL CODE: PE				DUPLICATE: Y (N) Duplicate Sample ID:					
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N) (replaced)									
SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE		SAMPLE PUMP FLOW RATE (L per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)								
MW-5	4	V	40 ml	HCl	N			VOCs (8260B); TPHG (8015M)		PE, PP		0.1	
MW-5	1	AG	1L	None	N			TPHd (8015M)		PE, PP		0.1	

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Bailer; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV



## GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-6	SAMPLE ID: MW-6	DATE: 1/23/22	

### PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 12 (ft bgs)	STATIC DEPTH TO WATER (feet): 5.80 ft	DEPTH OF WELL (feet): 11.85 ft
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY		(only fill out if applicable) = ( ) feet - ( ) feet X ( ) liters/foot = ( ) liters		
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME		(only fill out if applicable) = ( ) liters + ( ) liters/foot X ( ) feet + ( ) liters = ( ) liters		
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 1459	PURGING ENDED AT: 1521	TOTAL VOLUME PURGED (liters): 2.2

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min.)	DEPTH TO WATER (feet)	TEMP. (°C)	pH (standard units)	EC (microhm/cm or µS/cm at 25°C)	TURBIDITY (FTUs)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% satur- ation	mg/L			
1502	0.3	0.1	6.13	17.2	7.16	9.31	0.00	11.5	108	58	yellow clear	None
1505	0.6	0.1	6.16	17.4	7.18	9.34	0.00	5.9	0.55	58	clear	None
1508	0.9	0.1	6.19	17.2	7.17	9.36	0.80	5.3	0.49	59	more yellow clear	"
1511	1.2	0.1	6.22	17.2	7.19	9.39	0.00	4.9	0.46	59	yellow, x clear	None
1514	1.5	0.1	6.24	17.0	7.20	9.40	0.08	4.5	0.42	59	"	"
1517	1.8	0.1	6.25	16.9	7.19	9.42	0.00	4.4	0.41	59	"	"
1520	2.1	0.1	6.26	16.9	7.19	9.43	0.00	4.3	0.40	59	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.06; 1" = 0.15; 1.25" = 0.23; 2" = 0.61; 3" = 0.14; 4" = 2.5; 6" = 3.9; 8" = 5.6; 12" = 22.3  
 TUBING INSIDE DIA. CAPACITY (L/ft): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.018; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.061

### SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robin Mack				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 1522		SAMPLING ENDED AT: 1534	
PUMP OR TUBING DEPTH IN WELL (feet): 8				TUBING MATERIAL CODE: PE				DUPLICATE: Y		Duplicate Sample ID: 0	
FIELD DECONTAMINATION: PUMP Y N				TUBING Y N (replaced)							
SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT				INTENDED ANALYSIS AND/OR METHOD		SAMPLE PUMP FLOW RATE (L per minute)	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)						
MW-6	4	V	40 ml	HCl	N			VOCs (8260B); TPHG (8015M)		PE, PP	
MW-6	1	AG	1L	None	N			TPHd (8015M)		PE, PP	

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Bailor; C = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV

# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-7	SAMPLE ID: MW-7	DATE: 2/23/22	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 5' (ft bgs) to 12' (ft bgs)	STATIC DEPTH TO WATER (feet): 6.13	DEPTH OF WELL (feet): 12.01
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)			WELL CAPACITY: 1.8	
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 1407	PURGING ENDED AT: 1425	TOTAL VOLUME PURGED (liters): 1.8

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min.)	DEPTH TO WATER (feet)	TEMP. (°C)	pH (standard units)	EC (micro units) µmhos/cm or µS/cm	TURBIDITY (FTUs)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% satur- ation	mg/L			
1409	0.2	0.1	6.17	15.7	6.73	9.94	0.00	7.4	0.68	59	clear	None
1412	0.5	0.1	6.18	16.4	6.69	9.73	0.00	6.3	0.57	55	"	"
1415	0.8	0.1	6.18	16.7	6.61	9.57	0.00	5.6	0.50	56	"	"
1418	1.1	0.1	6.19	16.5	6.60	9.59	0.00	4.9	0.45	57	"	"
1421	1.4	0.1	6.18	16.4	6.60	9.61	0.00	5.0	0.45	58	"	"
1424	1.7	0.1	6.18	16.4	6.61	9.62	0.10	5.2	0.47	59	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.08; 1" = 0.10; 1.25" = 0.23; 2" = 0.81; 3" = 0.14; 4" = 2.9; 5" = 3.9; 6" = 5.6; 12" = 22.3  
TUBING INSIDE DIA. CAPACITY (L/Ft): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.081

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robin Mork		SAMPLER(S) SIGNATURE(S):		SAMPLING INITIATED AT: 1426	SAMPLING ENDED AT: 1439
PUMP OR TUBING DEPTH IN WELL (feet): 8		TUBING MATERIAL CODE: PE		DUPLICATE: Y (N) Duplicate Sample ID: 0	
FIELD DECONTAMINATION: PUMP Y (N)		TUBING Y (N (replaced))			

SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (L per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)			
MW-7	4	V	40 ml	HCl	N	VOCs (8260B); TPHG (8015M)	PE, PP	0.1
MW-7	1	AG	1L	None	N	TPHd (8015M)	PE, PP	0.1

REMARKS:

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOA; PP = Peristaltic Pump; SP = Submersible Pump; B = Baller; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV

# GROUNDWATER FIELD SAMPLING LOG

p.1 of 2

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 401 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-8	SAMPLE ID: MW-8	DATE: 2/24/22 (Sampling)	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 3 (ft bgs) to 12 (ft bgs)	STATIC DEPTH TO WATER (feet): 4.92	DEPTH OF WELL (feet): 11.91 WTC
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY		(11.91 - 4.92) feet X 0.61 liters/foot = 4.28 liters X 3 = 12.8		
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME				
(only fill out if applicable) = _____ liters + (_____ liters/foot X _____ feet) + _____ liters = _____ liters				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 8	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 8	PURGING INITIATED AT: 0938	PURGING ENDED AT: 1016	TOTAL VOLUME PURGED (liters): 12.8

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TEMP (°C)	pH (standard units)	EC (micro mhos/cm or µS/cm)	TURBIDITY (FTU)	DISSOLVED OXYGEN		ORP (mV)	COLOR (describe)	ODOR (describe)
								% saturation	mg/L			
0940	0.2	0.1	5.25	14.8	7.76	9.93	1.52	8.0	0.74	-15	Clear	None
0943	0.5	0.1	5.48	15.9	7.69	9.70	1.67	6.0	0.55	-14	Clear	(Petrol)
0946	0.8	0.1	5.65	16.3	7.52	9.40	6.64	4.8	0.45	-13	"	None
0949	2.0	0.4	5.86	16.7	9.47	9.32	5.11	4.4	0.41	-14	"	"
0952	3.2	0.4	6.11	16.6	7.39	9.23	4.00	4.2	0.39	-15	"	"
0955	4.4	0.4	6.30	16.8	7.35	9.20	3.25	3.9	0.37	-14	"	"
0958	5.6	0.4	6.61	16.6	7.34	9.17	1.61	3.9	0.36	-12	"	"
1001	6.8	0.4	6.76	16.8	7.32	9.20	2.22	3.8	0.36	-12	"	"
1004	8.0	0.4	6.94	17.1	7.26	9.21	1.79	3.7	0.35	-11	"	"
1007	9.2	0.4	7.10	17.2	7.27	9.19	2.41	3.7	0.34	-10	"	"
1010	10.4	0.4	7.25	17.1	7.26	9.18	1.99	3.7	0.34	-10	"	"

WELL CAPACITY (Liters Per Foot): 0.78" = 0.08; 1" = 0.15; 1.25" = 0.23; 2" = 0.61; 3" = 0.14; 4" = 2.5; 6" = 3.9; 8" = 5.5; 12" = 22.3  
TUBING INSIDE DIA. CAPACITY (L/FT): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.025; 1/2" = 0.030; 5/8" = 0.051

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robin Mack				SAMPLER(S) SIGNATURE(S): 				SAMPLING INITIATED AT: 1017		SAMPLING ENDED AT: 1031	
PUMP OR TUBING DEPTH IN WELL (feet): 8				TUBING MATERIAL CODE: PE				DUPLICATE: Y (N) Duplicate Sample ID:			
FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N (replaced))											

SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT		INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (L per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD FILTERED (Y or N) AND FILTER SIZE (µm)			
MW-8	4	V	40 ml	HCl	N	VOCs (8260B); TPHd (8015M)	PE, PP	0.1
MW-8	1	AG	1L	None	N	TPHd (8015M)	PE, PP	0.1

REMARKS: swapped out well cap

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOCs; PP = Peristaltic Pump; SP = Submersible Pump; B = Baller; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U.; Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV



## GROUNDWATER FIELD SAMPLING LOG

# GROUNDWATER FIELD SAMPLING LOG

SITE NAME: HAYWARD PARK CALTRAIN STATION		SITE LOCATION: 491 CONCAR DRIVE, SAN MATEO, CA	
WELL NO: MW-9	SAMPLE ID: MW-9 & 022422-MW	DATE: 7/24/22 (Sampling)	

## PURGING DATA

WELL DIAMETER (inches): 2	TUBING DIAMETER (inches): 0.25	WELL SCREEN INTERVAL DEPTH: 2 (ft bgs) to 10 (ft bgs)	STATIC DEPTH TO WATER (feet): 5.21 bgs	DEPTH OF WELL (feet): 9.91 bgs
WELL VOLUME PURGE: 1 WELL VOL. = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY (only fill out if applicable)			WELL CAPACITY: _____ liters/foot = _____ liters	
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable)				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 7	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 7	PURGING INITIATED AT: 1158	PURGING ENDED AT: 1224	TOTAL VOLUME PURGED (liters): 2.6

TIME	VOLUME PURGED (liters)	PURGE RATE (L/min)	DEPTH TO WATER (feet)	TEMP. (°C)	pH (standard units)	EC (microhm/cm or µS/cm)	TURBIDITY (FTU)	DISSOLVED OXYGEN (% saturation, mg/L)	ORP (mV)	COLOR (describe)	ODOR (describe)
1201	0.3	0.1	5.48	15.3	7.21	9.65	0.70	10.7 1.02	-79	clear	petrol
1204	0.6	0.1	5.50	15.7	7.19	9.56	1.10	5.5 0.53	-85	clear	"
1207	0.9	0.1	5.53	15.9	7.16	9.50	1.05	4.5 0.43	-90	"	"
1210	1.2	0.1	5.57	16.2	7.16	9.41	0.50	4.4 0.41	-90	"	"
1213	1.5	0.1	5.60	16.6	7.14	9.39	0.54	4.1 0.39	-91	"	"
1216	1.8	0.1	5.62	16.7	7.12	9.38	0.60	4.0 0.38	-93	"	"
1219	2.1	0.1	5.64	16.6	7.12	9.36	0.42	3.9 0.37	-95	"	"
1222	2.4	0.1	5.65	16.7	7.11	9.36	0.71	3.9 0.37	-95	"	"

WELL CAPACITY (Liters Per Foot): 0.75" = 0.08; 1" = 0.15; 1.25" = 0.23; 2" = 0.51; 2" = 0.14; 4" = 2.5; 6" = 3.9; 8" = 5.6; 12" = 22.3  
 TUBING INSIDE DIA. CAPACITY (L/ft): 1/8" = 0.002; 3/16" = 0.005; 1/4" = 0.010; 5/16" = 0.015; 3/8" = 0.023; 1/2" = 0.038; 5/8" = 0.081

## SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: WEST Robison Mack				SAMPLER(S) SIGNATURE(S): [Signature]				SAMPLING INITIATED AT: 1225		SAMPLING ENDED AT: 1242	
PUMP OR TUBING DEPTH IN WELL (feet): 7				TUBING MATERIAL CODE: PE				DUPLICATE: <input checked="" type="checkbox"/> N Duplicate Sample ID: 022422-MW			
FIELD DECONTAMINATION: PUMP Y (N)				TUBING Y (N/replaced)							
SAMPLE CONTAINER SPECIFICATION				SAMPLE TREATMENT				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	FIELD-FILTERED (Y or N) AND FILTER SIZE (µm)						
MW-9	4	V	40 ml	HCl	N			VOCs (8260B); TPHG (8015M)		PE, PP	
MW-9	1	AG	1L	None	N			TPHd (8015M)		PE, PP	
022422-MW	4	V	40 mL	HCl	N			VOCs/TPHd		PE, PP	

REMARKS: New cap

MATERIAL AND SAMPLING EQUIPMENT CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; V = VOC; PP = Peristaltic Pump; SP = Submersible Pump; B = Baller; O = Other (specify)

Stabilization Criteria: pH: ± 0.1 S.U. Temperature: ± 3% of reading (min ± 0.2 °C); Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.3 mg/L; ORP: ± 10 mV

**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-28-4 and 022522-4

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		55°, Sunny				
DATE:		2/25/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	S-141 and ICS-190 2/16/22				
	FLOW CONTROLLER SERIAL NO.:	658 and 218				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	1021				
	VACUUM HOLD TEST END TIME (24 HR):	1031				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	16	Gauge2:	16 15	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	16	Gauge2:	16 15	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)		HELIUM (%)	
	PRIOR TO PURGE		1031		23.0	
	DURING PURGE		1034		21.4	
	POST PURGE		1041		22.7	
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		1031	0.0	0.4	
	1 WELL VOLUME		1034	0.1	0.4	
	3 WELL VOLUMES		1041	0.1	0.5	

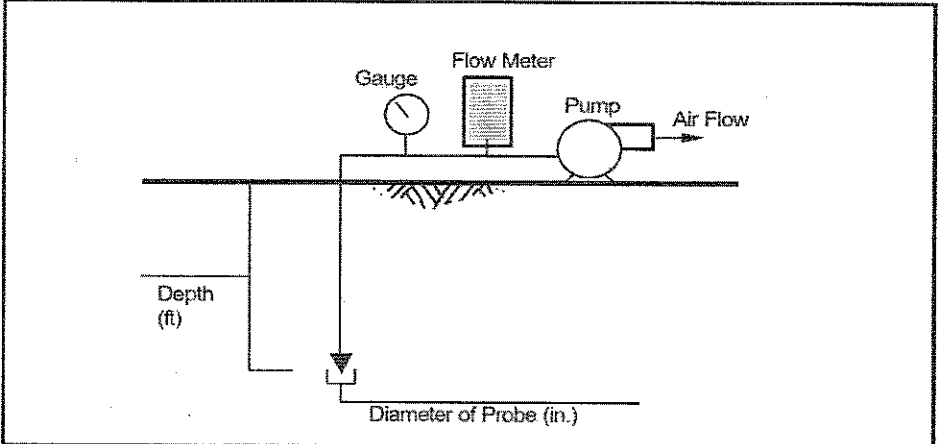
61=0      62=-1

**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-28-4 And 022522-4

PROJECT NAME:		Regis. Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		12/29/22					

		TIME	HELIUM	VACUUM	TIME	HELIUM	VACUUM
		(MINS)	(%)	(IN. Hg)	(MINS)	(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	APPLY TRACER GAS WITHIN THE SHROUD	1			12	20.7	12
		2	22.4	26	13		
		3			14	21.2	9.5
		4	23.0	23	15		
		5			16	22.0	7
		6	21.1	20	17		
		7			18		
		8	22.2	17.5	19		
		9			20		
		10	20.5	15	21		
		11			22		
		TIME CANISTER OPENED (24 HR)		1041		0100	
		TIME CANISTER CLOSED (24 HR)		1059		0118	
		TOTAL SAMPLE TIME (MINS):		18			
		INITIAL CANISTER VACUUM (IN. Hg)		29			
		FINAL CANISTER PRESSURE (IN. Hg):		5			
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)	1.5	3	4.5	
	FLOW METER READING	20	25	30	
	FLOW RATE (CC/MIN)				
	LENGTH OF TEST (SEC)	60	60	60	

**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-29-4**

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		55°, Sunny				
DATE:		2/29/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	ICS-866 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	801				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	0924				
	VACUUM HOLD TEST END TIME (24 HR):	0934				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	15	Gauge2:	15	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	15	Gauge2:	15	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)		HELIUM (%)	
	PRIOR TO PURGE		0934		23.0	
	DURING PURGE		0937		20.1	
	POST PURGE		0944		21.4	
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		0934	0.0	0.6	
	1 WELL VOLUME		0937	0.0	0.7	
	3 WELL VOLUMES		0944	0.0	0.5	

G1=2 G2=2



**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-29-4

PROJECT NAME:		Regis. Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/25/22					

		TIME	HELIUM	VACUUM	TIME	HELIUM	VACUUM
		(MINS)	(%)	(IN. Hg)	(MINS)	(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	APPLY TRACER GAS WITHIN THE SHROUD	1			12	23.0	9
		2	23.0	24	13		
		3			14	22.5	8
		4	22.9	20	15		
		5			16	20.3	6.5
		6	20.1	17	17		
		7			18	21.4	5.5
		8	21.0	14	19		
		9			20		
		10	22.7	12	21		
		11			22		
TIME CANISTER OPENED (24 HR)					0944		
TIME CANISTER CLOSED (24 HR)					1002		
TOTAL SAMPLE TIME (MINS):					18		
INITIAL CANISTER VACUUM (IN. Hg)					29		
FINAL CANISTER PRESSURE (IN. Hg):					5		
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)	2100			
	FLOW METER READING	20			
	FLOW RATE (CC/MIN)				
LENGTH OF TEST (SEC)	60				

**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-30-4**

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		50°, Sunny				
DATE:		2/25/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	IC 5-315 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	312				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	0833				
	VACUUM HOLD TEST END TIME (24 HR):	0843				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	15	Gauge2:	15	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	15	Gauge2:	15	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)		HELIUM (%)	
	PRIOR TO PURGE		0843		23.0	
	DURING PURGE		0846		21.8	
	POST PURGE		0853		22.7	
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	
	START		0843	0.7	0.7	
	1 WELL VOLUME		0846	0.7	0.6	
	3 WELL VOLUMES		0853	0.1	0.6	
						Use 1L tedlar bag

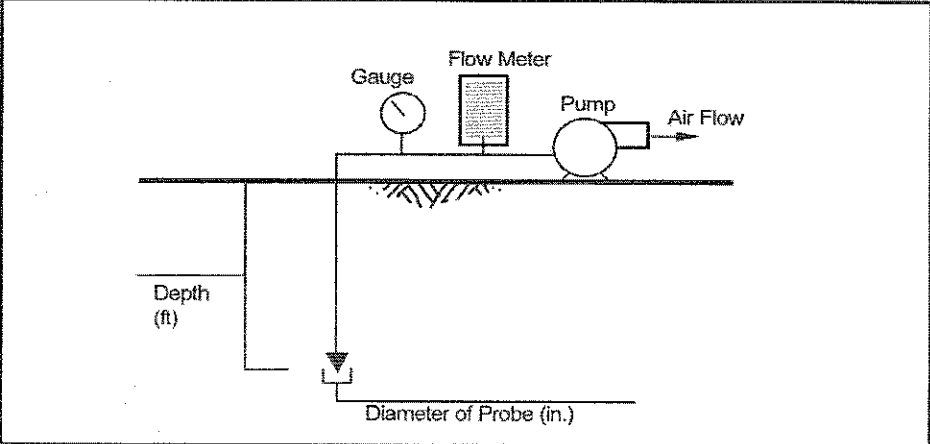
G1 = -1      G2 = -1

**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-30-4**

PROJECT NAME:		Regis. Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/29/22					

		TIME	HELIUM	VACUUM	TIME	HELIUM	VACUUM
		(MINS)	(%)	(IN. Hg)	(MINS)	(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	APPLY TRACER GAS WITHIN THE SHROUD	1			12		
		2	22.5	21	13		
		3			14		
		4	21.3	15	15		
		5			16		
		6	22.1	11	17		
		7			18		
		8	20.6	6	19		
		9			20		
		10			21		
		11			22		
TIME CANISTER OPENED (24 HR)					0853		
TIME CANISTER CLOSED (24 HR)					0901		
TOTAL SAMPLE TIME (MINS):					8		
INITIAL CANISTER VACUUM (IN. Hg)					29		
FINAL CANISTER PRESSURE (IN. Hg):					5		
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)	14	20	23	
	FLOW METER READING	20	25	30	
	FLOW RATE (CC/MIN)				
	LENGTH OF TEST (SEC)	60	60	60	

**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-32-4**

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		55°, Sunny				
DATE:		2/24/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	ICS-849 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	738				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	1527				
	VACUUM HOLD TEST END TIME (24 HR):	1537				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	20	Gauge2:	16	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	20	Gauge2:	16	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)	HELIUM (%)		
	PRIOR TO PURGE		1537	21.9		
	DURING PURGE		1540	22.3		
	POST PURGE		1547	21.7		
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		1537	0.1	2.3	
	1 WELL VOLUME		1540	0.1	3.8	
	3 WELL VOLUMES		1547	0.1	3.9	

G1 = 8      G2 = 0

**SOIL VAPOR SAMPLING LOG, SAMPLE ID:**

*W-32-4*

PROJECT NAME:		Regis.Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		<i>2/24/22</i>					

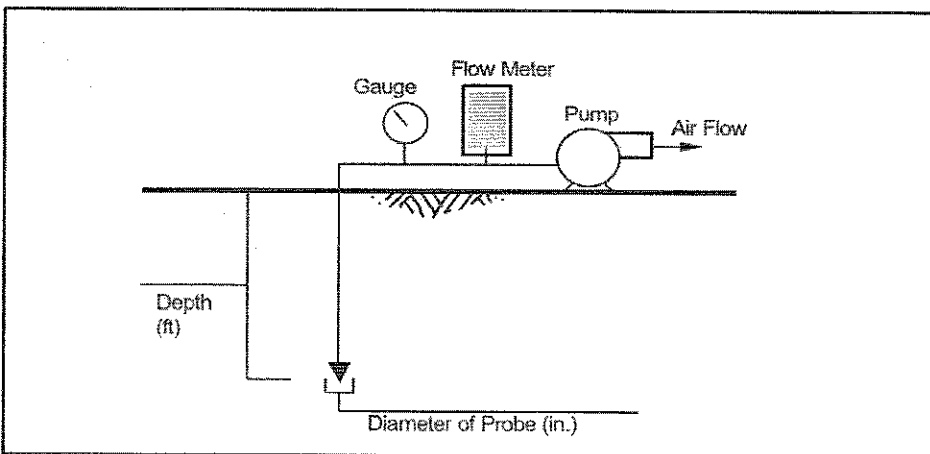
  

	TIME (MINS)	HELIUM	VACUUM	TIME (MINS)	HELIUM	VACUUM
		(%)	(IN. Hg)		(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	1	<i>22.2</i>	<i>27</i>	12		
	2	<i>↓</i>	<i>↓</i>	13		
	3			14		
	4	<i>21.0</i>	<i>22</i>	15		
	5			16		
	6	<i>20.8</i>	<i>15</i>	17		
	7			18		
	8	<i>21.3</i>	<i>8</i>	19		
	9			20		
	10			21		
	11			22		

APPLY TRACER GAS WITHIN THE SHROUD

TIME CANISTER OPENED (24 HR)	<i>1647</i>
TIME CANISTER CLOSED (24 HR)	<i>1956</i>
TOTAL SAMPLE TIME (MINS):	<i>9</i>
INITIAL CANISTER VACUUM (IN. Hg)	<i>730</i>
FINAL CANISTER PRESSURE (IN. Hg):	<i>5</i>

Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)				
	FLOW METER READING				
	FLOW RATE (CC/MIN)				
	LENGTH OF TEST (SEC)				

**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-34-4

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		54° Sunny				
DATE:		2/24/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	ICS-723 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	761				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
PURGE TIME (SEC):	200	601				
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	1055#				
	VACUUM HOLD TEST END TIME (24 HR):	1105				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1: 15	Gauge2: 16			
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1: 15	Gauge2: 16			
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)	HELIUM (%)		
	PRIOR TO PURGE		1105	21.0		
	DURING PURGE		1108	20.2		
	POST PURGE		1115	20.7		
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		1105	0.0	3.3	
	1 WELL VOLUME		1108	0.0	3.3	
	3 WELL VOLUMES		1115	0.0	1.2	

G-120

G-220

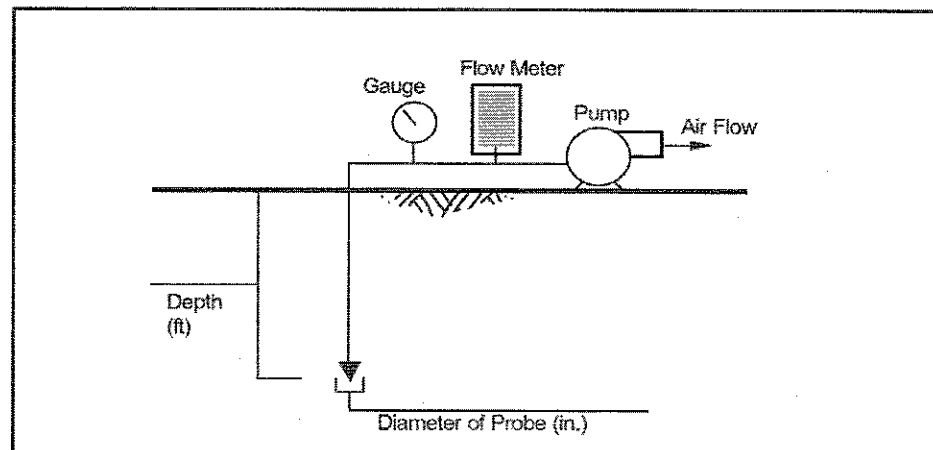
**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-34-4**

PROJECT NAME:		Regis.Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/24/22					

		TIME	HELIUM	VACUUM	TIME	HELIUM	VACUUM
		(MINS)	(%)	(IN. Hg)	(MINS)	(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	APPLY TRACER GAS WITHIN THE SHROUD	1			12	22.9	21
		2	20.0	29	13		
		3			14	20.1	21
		4	21.3	25	15		
		5			16		
		6	20.3	23	17		
		7			18		
		8	20.7	22	19		
		9			20	21.0	21
		10	21.6	22	21		
		11			22		
TIME CANISTER OPENED (24 HR)					1115		
TIME CANISTER CLOSED (24 HR)					1300		
TOTAL SAMPLE TIME (MINS):					105		
INITIAL CANISTER VACUUM (IN. Hg)					<del>20</del> 23.0		
FINAL CANISTER PRESSURE (IN. Hg):					16		
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

**INTRINSIC  
PERMEABILITY  
TESTING**



TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
VACUUM (IN. WATER)				
FLOW METER READING				
FLOW RATE (CC/MIN)				
LENGTH OF TEST (SEC)				

**SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-35-4**

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		55°, Sunny				
DATE:		2/24/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4				
	SUMMA CANISTER ID:	IC 5-187 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	656				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	1.5				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	1348				
	VACUUM HOLD TEST END TIME (24 HR):	1358				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	20	Gauge2:	19	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	20	Gauge2:	19	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)	HELIUM (%)		
	PRIOR TO PURGE		1358	22.3		
	DURING PURGE		1401	20.4		
	POST PURGE		1408	21.4		
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		1358	0.0	1.7	
	1 WELL VOLUME		1401	0.0	1.7	
	3 WELL VOLUMES		1408	0.0	0.9	

G1 = 6

G2 = 1

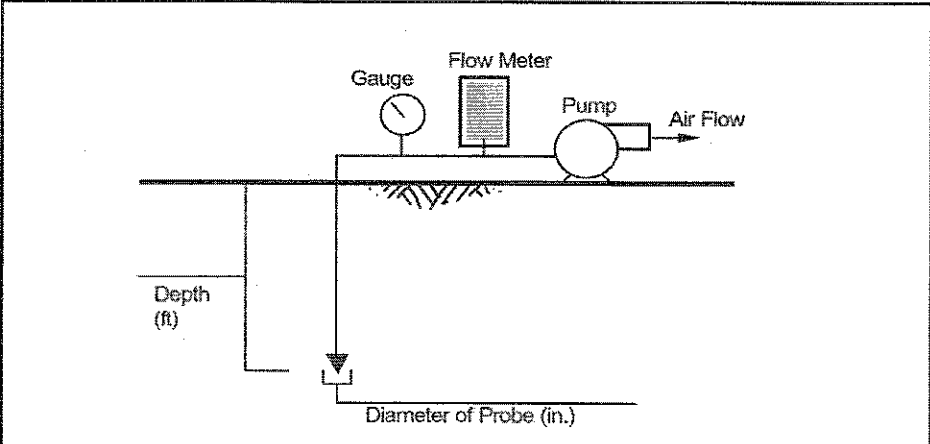


**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-35-4

PROJECT NAME:		Regis.Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/24/22					

		TIME	HELIUM	VACUUM	TIME	HELIUM	VACUUM
		(MINS)	(%)	(IN. Hg)	(MINS)	(%)	(IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	APPLY TRACER GAS WITHIN THE SHROUD	1			12		
		2	20.1	22	13		
		3			14		
		4	21.4	16	15		
		5			16		
		6	20.1	8	17		
		7			18		
		8			19		
		9			20		
		10			21		
		11			22		
TIME CANISTER OPENED (24 HR)				1408			
TIME CANISTER CLOSED (24 HR)				1415			
TOTAL SAMPLE TIME (MINS):				7			
INITIAL CANISTER VACUUM (IN. Hg)				29			
FINAL CANISTER PRESSURE (IN. Hg):				5			
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)				
	FLOW METER READING				
	FLOW RATE (CC/MIN)				
	LENGTH OF TEST (SEC)				

## SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-36-2.5

PROJECT NAME:		Regis. Hayward Park Station				
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA				
WEATHER:		55°, <del>at</del> Sunny				
DATE:		2/24/22				
SAMPLED BY:		AK				
WELL TYPE:		Temporary				
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	2.5				
	SUMMA CANISTER ID:	IC 5-105 2/17/22				
	FLOW CONTROLLER SERIAL NO.:	668				
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25				
	DRY BENTONITE INTERVAL (FT):	1				
	SAND PACK INTERVAL (FT):	<del>1.5</del> 1				
	TUBING TYPE:	Teflon				
	TUBING LENGTH (FT):	7				
	TUBING ID (INCH):	0.17				
	PURGE VOLUME (CC):	417				
	PURGE RATE (CC/MIN):	125				
	PURGE WELL VOLUMES	1	3			
	PURGE TIME (MIN):	3.34	10.02			
	PURGE TIME (SEC):	200	601			
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	1433				
	VACUUM HOLD TEST END TIME (24 HR):	1447				
	VACUUM HOLD TEST DURATION (MIN):	10				
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1:	15	Gauge2:	15	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1:	15	Gauge2:	15	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD		TIME (24 HR)	HELIUM (%)		
	PRIOR TO PURGE		1443	20.1		
	DURING PURGE		1446	22.4		
	POST PURGE		1453	21.7		
	MEASUREMENTS FROM SAMPLING TRAIN		TIME (24 HR)	HELIUM (%)	PID (PPMV)	Use 1L tedlar bag
	START		1443	0.0	1.7	
	1 WELL VOLUME		1446	0.0	4.4	
	3 WELL VOLUMES		1453	0.0	1.3	

61=0

62=0

## SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-36-2-5

PROJECT NAME:		Regis. Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/24/22					

	TIME (MINS)	HELIUM (%)	VACUUM (IN. Hg)	TIME (MINS)	HELIUM (%)	VACUUM (IN. Hg)	
SAMPLE COLLECTION AND TRACER GAS MONITORING	1		2	12			
	2	22.3	24	13			
	3			14			
	4	20.1	15	15			
	5			16			
	6	21.0	9	17			
	7			18			
	8			19			
	9			20			
	10			21			
	11			22			
TIME CANISTER OPENED (24 HR)				1453			
TIME CANISTER CLOSED (24 HR)				1500			
TOTAL SAMPLE TIME (MINS):				7			
INITIAL CANISTER VACUUM (IN. Hg)				30			
FINAL CANISTER PRESSURE (IN. Hg):				5			
Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg							

INTRINSIC PERMEABILITY TESTING					
	TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
	VACUUM (IN. WATER)				
	FLOW METER READING	20	25	30	
	FLOW RATE (CC/MIN)	235	365	537	
	LENGTH OF TEST (SEC)				

**SOIL VAPOR SAMPLING LOG, SAMPLE ID:** W-37-4

PROJECT NAME:		Regis. Hayward Park Station		
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA		
WEATHER:		36° Clear		
DATE:		2/25/22		
SAMPLED BY:		AK		
WELL TYPE:		Temporary		
SAMPLE DATA	VAPOR PROBE SAMPLE DEPTH (FT):	4		
	SUMMA CANISTER ID:	ICS-134 2/17/22		
	FLOW CONTROLLER SERIAL NO.:	655		
PURGE VOLUME CALCULATION	BORING/WELL DIAMETER (INCH):	2.25		
	DRY BENTONITE INTERVAL (FT):	1		
	SAND PACK INTERVAL (FT):	1.5		
	TUBING TYPE:	Teflon		
	TUBING LENGTH (FT):	7		
	TUBING ID (INCH):	0.17		
	PURGE VOLUME (CC):	417		
	PURGE RATE (CC/MIN):	125		
	PURGE WELL VOLUMES	1	3	
	PURGE TIME (MIN):	3.34	10.02	
PURGE TIME (SEC):	200	601		
SHUT IN/ 10-MINUTE VACUUM TEST	VACUUM HOLD TEST START TIME (24 HR):	0730		
	VACUUM HOLD TEST END TIME (24 HR):	0740		
	VACUUM HOLD TEST DURATION (MIN):	10		
	INITIAL CANISTER VACUUM (IN. Hg)	Gauge1: 21	Gauge2: 21	
	FINAL CANISTER VACUUM (IN. Hg):	Gauge1: 21	Gauge2: 21	
PURGE AND SAMPLE TRAIN LEAK TEST	MEASUREMENTS WITHIN SHROUD	TIME (24 HR)	HELIUM (%)	
	PRIOR TO PURGE	0740	22.1	
	DURING PURGE	0743	22.2	
	POST PURGE	0750	21.7	
	MEASUREMENTS FROM SAMPLING TRAIN	TIME (24 HR)	HELIUM (%)	PID (PPMV)
	START	0740	0.0	1.6
	1 WELL VOLUME	0743	0.0	1.8
	3 WELL VOLUMES	0750	0.0	1.0
				Use 1L tedlar bag

G1=0

G2=1

# SOIL VAPOR SAMPLING LOG, SAMPLE ID: W-37-4

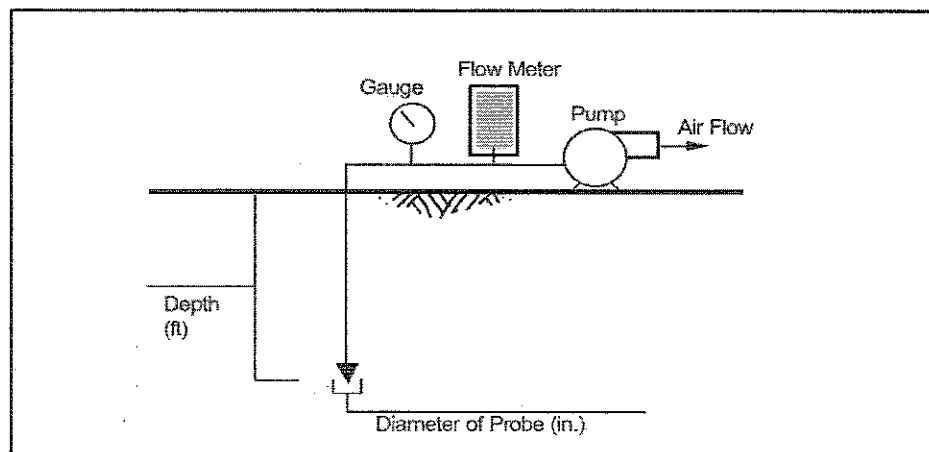
PROJECT NAME:		Regis. Hayward Park Station					
PROJECT LOCATION:		401 Concar Drive, San Mateo, CA					
DATE:		2/25/22					

	TIME (MINS)	HELIUM (%)	VACUUM (IN. Hg)	TIME (MINS)	HELIUM (%)	VACUUM (IN. Hg)
SAMPLE COLLECTION AND TRACER GAS MONITORING	1			12	20.0	11.5
	2	22.5	25	13		
	3		2	14	22.7	10
	4	20.1	22	15		
	5			16	20.6	8
	6	22.2	19	17		
	7			18	22.0	6
	8	22.5	16	19		
	9			20		
	10	22.3	13	21		
	11			22		
TIME CANISTER OPENED (24 HR)				0750		
TIME CANISTER CLOSED (24 HR)				0909		
TOTAL SAMPLE TIME (MINS):				19		
INITIAL CANISTER VACUUM (IN. Hg)				29		
FINAL CANISTER PRESSURE (IN. Hg):				5		

Note: Do not use if vacuum is <29" Hg on opening; Close canister at 5" Hg

## INTRINSIC PERMEABILITY TESTING



TEST THRU WELL TUBING/NO MANIFOLD	TEST 1	TEST 2	TEST 3	TEST 4
VACUUM (IN. WATER)	0.3	0.7	<del>0.9</del> 1.0	
FLOW METER READING	20	25	30	
FLOW RATE (CC/MIN)				
LENGTH OF TEST (SEC)	60	60	60	

**APPENDIX D**

**LABORATORY ANALYTICAL DATA**

**AND CHAIN-OF-CUSTODY FORMS**



K PRIME INC.

## LABORATORY TEST REPORT

ACCT: 9946

TO: MS. SHARON SQUIRE  
WEST ENVIRONMENTAL S&T  
711 GRAND AVENUE, SUITE 220  
SAN RAFAEL, CA 94901

Phone: 415-460-6770  
Email: [main@westenvironmental.com](mailto:main@westenvironmental.com)

FROM: Richard A. Kagel, Ph.D. *RAK*  
Laboratory Director *by AB*  
*3/1/22*

SUBJECT: LABORATORY RESULTS FOR YOUR PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

The following samples were received at our laboratory on February 23, 2022.

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
W-25-0.5'	SOIL	2/23/2022	9:40	228941
W-25-3'	SOIL	2/23/2022	9:55	228942
W-25-6'	SOIL	2/23/2022	10:02	228943
W-25-10'	SOIL	2/23/2022	10:17	228944
W-26-0.5'	SOIL	2/23/2022	10:08	228945
W-26-3'	SOIL	2/23/2022	10:24	228946
W-26-6'	SOIL	2/23/2022	10:33	228947
W-26-10'	SOIL	2/23/2022	10:53	228948
W-27-4'	SOIL	2/23/2022	9:10	228949
W-27-3'	SOIL	2/23/2022	9:00	228950
W-27-6'	SOIL	2/23/2022	9:20	228951
W-27-10'	SOIL	2/23/2022	9:30	228952
022322-SOIL	SOIL	2/23/2022	1:00	228953

Test results included in this report meet the requirements of ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board (ANAB), and/or the requirements of the California Environmental Laboratory Accreditation Program (CA-ELAP), as applicable. Refer to certificates and scopes of accreditation AT-1427 (ANAB) and CA-ELAP #1532.

Results relate only to the samples tested. This test report shall not be reproduced except in full, without written permission of the laboratory.

If there are questions or concerns regarding this report, please contact your laboratory representative.

**K Prime, Inc.**

3621 Westwind Blvd.  
Santa Rosa, CA 95403

Tel: (707)-527-7574 Fax: (707)-527-7879

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-25-0.5'  
LAB NO: 228941  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:40  
BATCH NO: 021122S1  
DATE ANALYZED: 02/25/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	2.43	ND
CHLOROMETHANE	74-87-3	2.43	ND
VINYL CHLORIDE	75-01-4	2.43	ND
BROMOMETHANE	74-83-9	2.43	ND
CHLOROETHANE	75-00-3	2.43	ND
TRICHLOROFLUOROMETHANE	75-69-4	2.43	ND
1,1-DICHLOROETHENE	75-35-4	2.43	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	2.43	ND
METHYLENE CHLORIDE	75-09-2	12.1	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	2.43	ND
1,1-DICHLOROETHANE	75-34-3	2.43	ND
CIS-1,2-DICHLOROETHENE	156-59-2	2.43	ND
2,2-DICHLOROPROPANE	594-20-7	2.43	ND
BROMOCHLOROMETHANE	74-97-5	2.43	ND
CHLOROFORM	67-66-3	2.43	ND
1,1,1-TRICHLOROETHANE	71-55-6	2.43	ND
CARBON TETRACHLORIDE	56-23-5	2.43	ND
1,1-DICHLOROPROPENE	563-58-6	2.43	ND
BENZENE	71-43-2	2.43	ND
1,2-DICHLOROETHANE	107-06-2	2.43	ND
TRICHLOROETHENE	79-01-6	2.43	ND
1,2-DICHLOROPROPANE	78-87-5	2.43	ND
DIBROMOMETHANE	74-95-3	2.43	ND
BROMODICHLOROMETHANE	75-27-4	2.43	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	2.43	ND
TOLUENE	108-88-3	2.43	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	2.43	ND
1,1,2-TRICHLOROETHANE	79-00-5	2.43	ND
TETRACHLOROETHENE	127-18-4	2.43	ND
1,3-DICHLOROPROPANE	142-28-9	2.43	ND
DIBROMOCHLOROMETHANE	124-48-1	2.43	ND
1,2-DIBROMOETHANE	106-93-4	2.43	ND
CHLOROBENZENE	108-90-7	2.43	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	2.43	ND
ETHYLBENZENE	100-41-4	2.43	ND
XYLENE (M+P)	1330-20-7	2.43	ND
XYLENE (O)	1330-20-7	2.43	ND
STYRENE	100-42-5	2.43	ND
BROMOFORM	75-25-2	2.43	ND
ISOPROPYLBENZENE	98-82-8	2.43	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	2.43	ND
BROMOBENZENE	108-86-1	2.43	ND
1,2,3-TRICHLOROPROPANE	96-18-4	2.43	ND
N-PROPYLBENZENE	103-65-1	2.43	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-25-0.5'**  
**LAB NO: 228941**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:40**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	2.43	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	2.43	ND
4-CHLOROTOLUENE	106-43-4	2.43	ND
TERT-BUTYLBENZENE	98-06-6	2.43	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	2.43	ND
SEC-BUTYLBENZENE	135-98-8	2.43	ND
1,3-DICHLOROBENZENE	541-73-1	2.43	ND
4-ISOPROPYLTOLUENE	99-87-6	2.43	ND
1,4-DICHLOROBENZENE	106-46-7	2.43	ND
N-BUTYLBENZENE	104-51-8	2.43	ND
1,2-DICHLOROBENZENE	95-50-1	2.43	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2.43	ND
1,2,4-TRICHLOROBENZENE	120-82-1	4.85	ND
HEXACHLOROBUTADIENE	87-68-3	4.85	ND
NAPHTHALENE	91-20-3	4.85	ND
1,2,3-TRICHLOROBENZENE	87-61-6	4.85	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	97
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	96

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-25-3'  
LAB NO: 228942  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:55  
BATCH NO: 021122S1

DATE ANALYZED: 02/24/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.78	ND
CHLOROMETHANE	74-87-3	1.78	ND
VINYL CHLORIDE	75-01-4	1.78	ND
BROMOMETHANE	74-83-9	1.78	ND
CHLOROETHANE	75-00-3	1.78	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.78	ND
1,1-DICHLOROETHENE	75-35-4	1.78	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.78	ND
METHYLENE CHLORIDE	75-09-2	8.88	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.78	ND
1,1-DICHLOROETHANE	75-34-3	1.78	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.78	ND
2,2-DICHLOROPROPANE	594-20-7	1.78	ND
BROMOCHLOROMETHANE	74-97-5	1.78	ND
CHLOROFORM	67-66-3	1.78	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.78	ND
CARBON TETRACHLORIDE	56-23-5	1.78	ND
1,1-DICHLOROPROPENE	563-58-6	1.78	ND
BENZENE	71-43-2	1.78	ND
1,2-DICHLOROETHANE	107-06-2	1.78	5.38
TRICHLOROETHENE	79-01-6	1.78	ND
1,2-DICHLOROPROPANE	78-87-5	1.78	ND
DIBROMOMETHANE	74-95-3	1.78	ND
BROMODICHLOROMETHANE	75-27-4	1.78	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.78	ND
TOLUENE	108-88-3	1.78	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.78	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.78	ND
TETRACHLOROETHENE	127-18-4	1.78	ND
1,3-DICHLOROPROPANE	142-28-9	1.78	ND
DIBROMOCHLOROMETHANE	124-48-1	1.78	ND
1,2-DIBROMOETHANE	106-93-4	1.78	ND
CHLOROBENZENE	108-90-7	1.78	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.78	ND
ETHYLBENZENE	100-41-4	1.78	ND
XYLENE (M+P)	1330-20-7	1.78	ND
XYLENE (O)	1330-20-7	1.78	ND
STYRENE	100-42-5	1.78	ND
BROMOFORM	75-25-2	1.78	ND
ISOPROPYLBENZENE	98-82-8	1.78	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.78	ND
BROMOBENZENE	108-86-1	1.78	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.78	ND
N-PROPYLBENZENE	103-65-1	1.78	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-25-3'**  
**LAB NO: 228942**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:55**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/24/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.78	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.78	ND
4-CHLOROTOLUENE	106-43-4	1.78	ND
TERT-BUTYLBENZENE	98-06-6	1.78	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.78	ND
SEC-BUTYLBENZENE	135-98-8	1.78	ND
1,3-DICHLOROBENZENE	541-73-1	1.78	ND
4-ISOPROPYLTOLUENE	99-87-6	1.78	ND
1,4-DICHLOROBENZENE	106-46-7	1.78	ND
N-BUTYLBENZENE	104-51-8	1.78	ND
1,2-DICHLOROBENZENE	95-50-1	1.78	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.78	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.55	ND
HEXACHLOROBUTADIENE	87-68-3	3.55	ND
NAPHTHALENE	91-20-3	3.55	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.55	ND

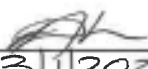
SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	99
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	96

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-25-6'**  
**LAB NO: 228943**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:02**  
**BATCH NO: 022222S1**  
**DATE ANALYZED: 02/26/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	2.65	ND
CHLOROMETHANE	74-87-3	2.65	ND
VINYL CHLORIDE	75-01-4	2.65	ND
BROMOMETHANE	74-83-9	2.65	ND
CHLOROETHANE	75-00-3	2.65	ND
TRICHLOROFLUOROMETHANE	75-69-4	2.65	ND
1,1-DICHLOROETHENE	75-35-4	2.65	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	2.65	ND
METHYLENE CHLORIDE	75-09-2	13.3	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	2.65	ND
1,1-DICHLOROETHANE	75-34-3	2.65	ND
CIS-1,2-DICHLOROETHENE	156-59-2	2.65	ND
2,2-DICHLOROPROPANE	594-20-7	2.65	ND
BROMOCHLOROMETHANE	74-97-5	2.65	ND
CHLOROFORM	67-66-3	2.65	ND
1,1,1-TRICHLOROETHANE	71-55-6	2.65	ND
CARBON TETRACHLORIDE	56-23-5	2.65	ND
1,1-DICHLOROPROPENE	563-58-6	2.65	ND
BENZENE	71-43-2	2.65	ND
1,2-DICHLOROETHANE	107-06-2	2.65	4.23
TRICHLOROETHENE	79-01-6	2.65	ND
1,2-DICHLOROPROPANE	78-87-5	2.65	ND
DIBROMOMETHANE	74-95-3	2.65	ND
BROMODICHLOROMETHANE	75-27-4	2.65	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	2.65	ND
TOLUENE	108-88-3	2.65	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	2.65	ND
1,1,2-TRICHLOROETHANE	79-00-5	2.65	ND
TETRACHLOROETHENE	127-18-4	2.65	ND
1,3-DICHLOROPROPANE	142-28-9	2.65	ND
DIBROMOCHLOROMETHANE	124-48-1	2.65	ND
1,2-DIBROMOETHANE	106-93-4	2.65	ND
CHLOROBENZENE	108-90-7	2.65	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	2.65	ND
ETHYLBENZENE	100-41-4	2.65	ND
XYLENE (M+P)	1330-20-7	2.65	ND
XYLENE (O)	1330-20-7	2.65	ND
STYRENE	100-42-5	2.65	ND
BROMOFORM	75-25-2	2.65	ND
ISOPROPYLBENZENE	98-82-8	2.65	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	2.65	ND
BROMOBENZENE	108-86-1	2.65	ND
1,2,3-TRICHLOROPROPANE	96-18-4	2.65	ND
N-PROPYLBENZENE	103-65-1	2.65	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-25-6'**  
**LAB NO: 228943**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:02**  
**BATCH NO: 022222S1**

**DATE ANALYZED: 02/26/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	2.65	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	2.65	ND
4-CHLOROTOLUENE	106-43-4	2.65	ND
TERT-BUTYLBENZENE	98-06-6	2.65	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	2.65	ND
SEC-BUTYLBENZENE	135-98-8	2.65	ND
1,3-DICHLOROBENZENE	541-73-1	2.65	ND
4-ISOPROPYLTOLUENE	99-87-6	2.65	ND
1,4-DICHLOROBENZENE	106-46-7	2.65	ND
N-BUTYLBENZENE	104-51-8	2.65	ND
1,2-DICHLOROBENZENE	95-50-1	2.65	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2.65	ND
1,2,4-TRICHLOROBENZENE	120-82-1	5.30	ND
HEXACHLOROBUTADIENE	87-68-3	5.30	ND
NAPHTHALENE	91-20-3	5.30	ND
1,2,3-TRICHLOROBENZENE	87-61-6	5.30	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	112
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	102

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-25-10'  
LAB NO: 228944  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 10:17  
BATCH NO: 022222S1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	23.5	ND
CHLOROMETHANE	74-87-3	23.5	ND
VINYL CHLORIDE	75-01-4	23.5	ND
BROMOMETHANE	74-83-9	23.5	ND
CHLOROETHANE	75-00-3	23.5	ND
TRICHLOROFLUOROMETHANE	75-69-4	23.5	ND
1,1-DICHLOROETHENE	75-35-4	23.5	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	23.5	ND
METHYLENE CHLORIDE	75-09-2	117	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	23.5	ND
1,1-DICHLOROETHANE	75-34-3	23.5	ND
CIS-1,2-DICHLOROETHENE	156-59-2	23.5	ND
2,2-DICHLOROPROPANE	594-20-7	23.5	ND
BROMOCHLOROMETHANE	74-97-5	23.5	ND
CHLOROFORM	67-66-3	23.5	ND
1,1,1-TRICHLOROETHANE	71-55-6	23.5	ND
CARBON TETRACHLORIDE	56-23-5	23.5	ND
1,1-DICHLOROPROPENE	563-58-6	23.5	ND
BENZENE	71-43-2	23.5	ND
1,2-DICHLOROETHANE	107-06-2	23.5	613
TRICHLOROETHENE	79-01-6	23.5	ND
1,2-DICHLOROPROPANE	78-87-5	23.5	ND
DIBROMOMETHANE	74-95-3	23.5	ND
BROMODICHLOROMETHANE	75-27-4	23.5	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	23.5	ND
TOLUENE	108-88-3	23.5	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	23.5	ND
1,1,2-TRICHLOROETHANE	79-00-5	23.5	ND
TETRACHLOROETHENE	127-18-4	23.5	ND
1,3-DICHLOROPROPANE	142-28-9	23.5	ND
DIBROMOCHLOROMETHANE	124-48-1	23.5	ND
1,2-DIBROMOETHANE	106-93-4	23.5	ND
CHLOROBENZENE	108-90-7	23.5	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	23.5	ND
ETHYLBENZENE	100-41-4	23.5	ND
XYLENE (M+P)	1330-20-7	23.5	ND
XYLENE (O)	1330-20-7	23.5	ND
STYRENE	100-42-5	23.5	ND
BROMOFORM	75-25-2	23.5	ND
ISOPROPYLBENZENE	98-82-8	23.5	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	23.5	ND
BROMOBENZENE	108-86-1	23.5	ND
1,2,3-TRICHLOROPROPANE	96-18-4	23.5	ND
N-PROPYLBENZENE	103-65-1	23.5	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-25-10'**  
**LAB NO: 228944**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:17**  
**BATCH NO: 022222S1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	23.5	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	23.5	ND
4-CHLOROTOLUENE	106-43-4	23.5	ND
TERT-BUTYLBENZENE	98-06-6	23.5	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	23.5	ND
SEC-BUTYLBENZENE	135-98-8	23.5	ND
1,3-DICHLOROBENZENE	541-73-1	23.5	ND
4-ISOPROPYLTOLUENE	99-87-6	23.5	ND
1,4-DICHLOROBENZENE	106-46-7	23.5	ND
N-BUTYLBENZENE	104-51-8	23.5	ND
1,2-DICHLOROBENZENE	95-50-1	23.5	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	23.5	ND
1,2,4-TRICHLOROBENZENE	120-82-1	47.0	ND
HEXACHLOROBUTADIENE	87-68-3	47.0	ND
NAPHTHALENE	91-20-3	47.0	ND
1,2,3-TRICHLOROBENZENE	87-61-6	47.0	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	93
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	96

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 2/1/2022

**K PRIME, INC.**  
**LABORATORY REPORT**

**SAMPLE ID:** W-26-0.5'  
**LAB NO:** 228945  
**DATE SAMPLED:** 02/23/2022  
**TIME SAMPLED:** 10:08  
**BATCH NO:** 021122S1

**K PRIME PROJECT:** 9946  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**DATE ANALYZED:** 02/25/2022

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5035/8260

**SAMPLE TYPE:** SOIL  
**UNITS:** µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.98	ND
CHLOROMETHANE	74-87-3	1.98	ND
VINYL CHLORIDE	75-01-4	1.98	ND
BROMOMETHANE	74-83-9	1.98	ND
CHLOROETHANE	75-00-3	1.98	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.98	ND
1,1-DICHLOROETHENE	75-35-4	1.98	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.98	ND
METHYLENE CHLORIDE	75-09-2	9.88	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.98	ND
1,1-DICHLOROETHANE	75-34-3	1.98	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.98	ND
2,2-DICHLOROPROPANE	594-20-7	1.98	ND
BROMOCHLOROMETHANE	74-97-5	1.98	ND
CHLOROFORM	67-66-3	1.98	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.98	ND
CARBON TETRACHLORIDE	56-23-5	1.98	ND
1,1-DICHLOROPROPENE	563-58-6	1.98	ND
BENZENE	71-43-2	1.98	ND
1,2-DICHLOROETHANE	107-06-2	1.98	ND
TRICHLOROETHENE	79-01-6	1.98	ND
1,2-DICHLOROPROPANE	78-87-5	1.98	ND
DIBROMOMETHANE	74-95-3	1.98	ND
BROMODICHLOROMETHANE	75-27-4	1.98	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.98	ND
TOLUENE	108-88-3	1.98	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.98	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.98	ND
TETRACHLOROETHENE	127-18-4	1.98	ND
1,3-DICHLOROPROPANE	142-28-9	1.98	ND
DIBROMOCHLOROMETHANE	124-48-1	1.98	ND
1,2-DIBROMOETHANE	106-93-4	1.98	ND
CHLOROBENZENE	108-90-7	1.98	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.98	ND
ETHYLBENZENE	100-41-4	1.98	ND
XYLENE (M+P)	1330-20-7	1.98	ND
XYLENE (O)	1330-20-7	1.98	ND
STYRENE	100-42-5	1.98	ND
BROMOFORM	75-25-2	1.98	ND
ISOPROPYLBENZENE	98-82-8	1.98	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.98	ND
BROMOBENZENE	108-86-1	1.98	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.98	ND
N-PROPYLBENZENE	103-65-1	1.98	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-26-0.5'**  
**LAB NO: 228945**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:08**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.98	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.98	ND
4-CHLOROTOLUENE	106-43-4	1.98	ND
TERT-BUTYLBENZENE	98-06-6	1.98	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.98	ND
SEC-BUTYLBENZENE	135-98-8	1.98	ND
1,3-DICHLOROBENZENE	541-73-1	1.98	ND
4-ISOPROPYLTOLUENE	99-87-6	1.98	ND
1,4-DICHLOROBENZENE	106-46-7	1.98	ND
N-BUTYLBENZENE	104-51-8	1.98	ND
1,2-DICHLOROBENZENE	95-50-1	1.98	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.98	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.95	ND
HEXACHLOROBUTADIENE	87-68-3	3.95	ND
NAPHTHALENE	91-20-3	3.95	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.95	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	93
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	95

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-26-3'  
LAB NO: 228946  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 10:24  
BATCH NO: 021122S1  
DATE ANALYZED: 02/25/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.76	ND
CHLOROMETHANE	74-87-3	1.76	ND
VINYL CHLORIDE	75-01-4	1.76	ND
BROMOMETHANE	74-83-9	1.76	ND
CHLOROETHANE	75-00-3	1.76	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.76	ND
1,1-DICHLOROETHENE	75-35-4	1.76	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.76	ND
METHYLENE CHLORIDE	75-09-2	8.78	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.76	ND
1,1-DICHLOROETHANE	75-34-3	1.76	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.76	ND
2,2-DICHLOROPROPANE	594-20-7	1.76	ND
BROMOCHLOROMETHANE	74-97-5	1.76	ND
CHLOROFORM	67-66-3	1.76	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.76	ND
CARBON TETRACHLORIDE	56-23-5	1.76	ND
1,1-DICHLOROPROPENE	563-58-6	1.76	ND
BENZENE	71-43-2	1.76	ND
1,2-DICHLOROETHANE	107-06-2	1.76	ND
TRICHLOROETHENE	79-01-6	1.76	ND
1,2-DICHLOROPROPANE	78-87-5	1.76	ND
DIBROMOMETHANE	74-95-3	1.76	ND
BROMODICHLOROMETHANE	75-27-4	1.76	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.76	ND
TOLUENE	108-88-3	1.76	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.76	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.76	ND
TETRACHLOROETHENE	127-18-4	1.76	ND
1,3-DICHLOROPROPANE	142-28-9	1.76	ND
DIBROMOCHLOROMETHANE	124-48-1	1.76	ND
1,2-DIBROMOETHANE	106-93-4	1.76	ND
CHLOROBENZENE	108-90-7	1.76	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.76	ND
ETHYLBENZENE	100-41-4	1.76	ND
XYLENE (M+P)	1330-20-7	1.76	ND
XYLENE (O)	1330-20-7	1.76	ND
STYRENE	100-42-5	1.76	ND
BROMOFORM	75-25-2	1.76	ND
ISOPROPYLBENZENE	98-82-8	1.76	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.76	ND
BROMOBENZENE	108-86-1	1.76	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.76	ND
N-PROPYLBENZENE	103-65-1	1.76	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-26-3'**  
**LAB NO: 228946**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:24**  
**BATCH NO: 021122S1**

**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.76	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.76	ND
4-CHLOROTOLUENE	106-43-4	1.76	ND
TERT-BUTYLBENZENE	98-06-6	1.76	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.76	ND
SEC-BUTYLBENZENE	135-98-8	1.76	ND
1,3-DICHLOROBENZENE	541-73-1	1.76	ND
4-ISOPROPYLTOLUENE	99-87-6	1.76	ND
1,4-DICHLOROBENZENE	106-46-7	1.76	ND
N-BUTYLBENZENE	104-51-8	1.76	ND
1,2-DICHLOROBENZENE	95-50-1	1.76	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.76	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.51	ND
HEXACHLOROBUTADIENE	87-68-3	3.51	ND
NAPHTHALENE	91-20-3	3.51	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.51	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	93
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
**LABORATORY REPORT**

**SAMPLE ID:** W-26-6'  
**LAB NO:** 228947  
**DATE SAMPLED:** 02/23/2022  
**TIME SAMPLED:** 10:33  
**BATCH NO:** 021122S1

**K PRIME PROJECT:** 9946  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**DATE ANALYZED:** 02/25/2022

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5035/8260

**SAMPLE TYPE:** SOIL  
**UNITS:** µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	24.5	ND
CHLOROMETHANE	74-87-3	24.5	ND
VINYL CHLORIDE	75-01-4	24.5	ND
BROMOMETHANE	74-83-9	24.5	ND
CHLOROETHANE	75-00-3	24.5	ND
TRICHLOROFLUOROMETHANE	75-69-4	24.5	ND
1,1-DICHLOROETHENE	75-35-4	24.5	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	24.5	ND
METHYLENE CHLORIDE	75-09-2	122	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	24.5	ND
1,1-DICHLOROETHANE	75-34-3	24.5	ND
CIS-1,2-DICHLOROETHENE	156-59-2	24.5	ND
2,2-DICHLOROPROPANE	594-20-7	24.5	ND
BROMOCHLOROMETHANE	74-97-5	24.5	ND
CHLOROFORM	67-66-3	24.5	ND
1,1,1-TRICHLOROETHANE	71-55-6	24.5	ND
CARBON TETRACHLORIDE	56-23-5	24.5	ND
1,1-DICHLOROPROPENE	563-58-6	24.5	ND
BENZENE	71-43-2	24.5	ND
1,2-DICHLOROETHANE	107-06-2	24.5	ND
TRICHLOROETHENE	79-01-6	24.5	ND
1,2-DICHLOROPROPANE	78-87-5	24.5	ND
DIBROMOMETHANE	74-95-3	24.5	ND
BROMODICHLOROMETHANE	75-27-4	24.5	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	24.5	ND
TOLUENE	108-88-3	24.5	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	24.5	ND
1,1,2-TRICHLOROETHANE	79-00-5	24.5	ND
TETRACHLOROETHENE	127-18-4	24.5	ND
1,3-DICHLOROPROPANE	142-28-9	24.5	ND
DIBROMOCHLOROMETHANE	124-48-1	24.5	ND
1,2-DIBROMOETHANE	106-93-4	24.5	ND
CHLOROBENZENE	108-90-7	24.5	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	24.5	ND
ETHYLBENZENE	100-41-4	24.5	ND
XYLENE (M+P)	1330-20-7	24.5	ND
XYLENE (O)	1330-20-7	24.5	ND
STYRENE	100-42-5	24.5	ND
BROMOFORM	75-25-2	24.5	ND
ISOPROPYLBENZENE	98-82-8	24.5	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	24.5	ND
BROMOBENZENE	108-86-1	24.5	ND
1,2,3-TRICHLOROPROPANE	96-18-4	24.5	ND
N-PROPYLBENZENE	103-65-1	24.5	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-26-6'**  
**LAB NO: 228947**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:33**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	24.5	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	24.5	ND
4-CHLOROTOLUENE	106-43-4	24.5	ND
TERT-BUTYLBENZENE	98-06-6	24.5	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	24.5	ND
SEC-BUTYLBENZENE	135-98-8	24.5	ND
1,3-DICHLOROBENZENE	541-73-1	24.5	ND
4-ISOPROPYLTOLUENE	99-87-6	24.5	ND
1,4-DICHLOROBENZENE	106-46-7	24.5	ND
N-BUTYLBENZENE	104-51-8	24.5	ND
1,2-DICHLOROBENZENE	95-50-1	24.5	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	24.5	ND
1,2,4-TRICHLOROBENZENE	120-82-1	48.9	ND
HEXACHLOROBUTADIENE	87-68-3	48.9	ND
NAPHTHALENE	91-20-3	48.9	ND
1,2,3-TRICHLOROBENZENE	87-61-6	48.9	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	88
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	103

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-26-10'  
LAB NO: 228948  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 10:53  
BATCH NO: 021122S1

DATE ANALYZED: 02/25/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	24.2	ND
CHLOROMETHANE	74-87-3	24.2	ND
VINYL CHLORIDE	75-01-4	24.2	ND
BROMOMETHANE	74-83-9	24.2	ND
CHLOROETHANE	75-00-3	24.2	ND
TRICHLOROFLUOROMETHANE	75-69-4	24.2	ND
1,1-DICHLOROETHENE	75-35-4	24.2	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	24.2	ND
METHYLENE CHLORIDE	75-09-2	121	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	24.2	ND
1,1-DICHLOROETHANE	75-34-3	24.2	ND
CIS-1,2-DICHLOROETHENE	156-59-2	24.2	ND
2,2-DICHLOROPROPANE	594-20-7	24.2	ND
BROMOCHLOROMETHANE	74-97-5	24.2	ND
CHLOROFORM	67-66-3	24.2	ND
1,1,1-TRICHLOROETHANE	71-55-6	24.2	ND
CARBON TETRACHLORIDE	56-23-5	24.2	ND
1,1-DICHLOROPROPENE	563-58-6	24.2	ND
BENZENE	71-43-2	24.2	ND
1,2-DICHLOROETHANE	107-06-2	24.2	34.2
TRICHLOROETHENE	79-01-6	24.2	ND
1,2-DICHLOROPROPANE	78-87-5	24.2	ND
DIBROMOMETHANE	74-95-3	24.2	ND
BROMODICHLOROMETHANE	75-27-4	24.2	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	24.2	ND
TOLUENE	108-88-3	24.2	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	24.2	ND
1,1,2-TRICHLOROETHANE	79-00-5	24.2	ND
TETRACHLOROETHENE	127-18-4	24.2	ND
1,3-DICHLOROPROPANE	142-28-9	24.2	ND
DIBROMOCHLOROMETHANE	124-48-1	24.2	ND
1,2-DIBROMOETHANE	106-93-4	24.2	ND
CHLOROBENZENE	108-90-7	24.2	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	24.2	ND
ETHYLBENZENE	100-41-4	24.2	72.6
XYLENE (M+P)	1330-20-7	24.2	ND
XYLENE (O)	1330-20-7	24.2	ND
STYRENE	100-42-5	24.2	ND
BROMOFORM	75-25-2	24.2	ND
ISOPROPYLBENZENE	98-82-8	24.2	150
1,1,2,2-TETRACHLOROETHANE	79-34-5	24.2	ND
BROMOBENZENE	108-86-1	24.2	ND
1,2,3-TRICHLOROPROPANE	96-18-4	24.2	ND
N-PROPYLBENZENE	103-65-1	24.2	225



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-26-10'**  
**LAB NO: 228948**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 10:53**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	24.2	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	24.2	118
4-CHLOROTOLUENE	106-43-4	24.2	ND
TERT-BUTYLBENZENE	98-06-6	24.2	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	24.2	140
SEC-BUTYLBENZENE	135-98-8	24.2	164
1,3-DICHLOROBENZENE	541-73-1	24.2	ND
4-ISOPROPYLTOLUENE	99-87-6	24.2	71.4
1,4-DICHLOROBENZENE	106-46-7	24.2	ND
N-BUTYLBENZENE	104-51-8	24.2	236
1,2-DICHLOROBENZENE	95-50-1	24.2	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	24.2	ND
1,2,4-TRICHLOROBENZENE	120-82-1	48.4	ND
HEXACHLOROBUTADIENE	87-68-3	48.4	ND
NAPHTHALENE	91-20-3	48.4	131
1,2,3-TRICHLOROBENZENE	87-61-6	48.4	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	90
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	104

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
**LABORATORY REPORT**

**SAMPLE ID:** W-27-4'  
**LAB NO:** 228949  
**DATE SAMPLED:** 02/23/2022  
**TIME SAMPLED:** 09:10  
**BATCH NO:** 022222S1

**K PRIME PROJECT:** 9946  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**DATE ANALYZED:** 02/28/2022

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5035/8260

**SAMPLE TYPE:** SOIL  
**UNITS:** µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	26.2	ND
CHLOROMETHANE	74-87-3	26.2	ND
VINYL CHLORIDE	75-01-4	26.2	ND
BROMOMETHANE	74-83-9	26.2	ND
CHLOROETHANE	75-00-3	26.2	ND
TRICHLOROFLUOROMETHANE	75-69-4	26.2	ND
1,1-DICHLOROETHENE	75-35-4	26.2	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	26.2	ND
METHYLENE CHLORIDE	75-09-2	131	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	26.2	ND
1,1-DICHLOROETHANE	75-34-3	26.2	ND
CIS-1,2-DICHLOROETHENE	156-59-2	26.2	ND
2,2-DICHLOROPROPANE	594-20-7	26.2	ND
BROMOCHLOROMETHANE	74-97-5	26.2	ND
CHLOROFORM	67-66-3	26.2	ND
1,1,1-TRICHLOROETHANE	71-55-6	26.2	ND
CARBON TETRACHLORIDE	56-23-5	26.2	ND
1,1-DICHLOROPROPENE	563-58-6	26.2	ND
BENZENE	71-43-2	26.2	ND
1,2-DICHLOROETHANE	107-06-2	26.2	ND
TRICHLOROETHENE	79-01-6	26.2	ND
1,2-DICHLOROPROPANE	78-87-5	26.2	ND
DIBROMOMETHANE	74-95-3	26.2	ND
BROMODICHLOROMETHANE	75-27-4	26.2	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	26.2	ND
TOLUENE	108-88-3	26.2	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	26.2	ND
1,1,2-TRICHLOROETHANE	79-00-5	26.2	ND
TETRACHLOROETHENE	127-18-4	26.2	ND
1,3-DICHLOROPROPANE	142-28-9	26.2	ND
DIBROMOCHLOROMETHANE	124-48-1	26.2	ND
1,2-DIBROMOETHANE	106-93-4	26.2	ND
CHLOROBENZENE	108-90-7	26.2	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	26.2	ND
ETHYLBENZENE	100-41-4	26.2	ND
XYLENE (M+P)	1330-20-7	26.2	30.0
XYLENE (O)	1330-20-7	26.2	29.9
STYRENE	100-42-5	26.2	ND
BROMOFORM	75-25-2	26.2	ND
ISOPROPYLBENZENE	98-82-8	26.2	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	26.2	ND
BROMOBENZENE	108-86-1	26.2	ND
1,2,3-TRICHLOROPROPANE	96-18-4	26.2	ND
N-PROPYLBENZENE	103-65-1	26.2	26.4

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-27-4'**  
**LAB NO: 228949**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:10**  
**BATCH NO: 022222S1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	26.2	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	26.2	53.5
4-CHLOROTOLUENE	106-43-4	26.2	ND
TERT-BUTYLBENZENE	98-06-6	26.2	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	26.2	107
SEC-BUTYLBENZENE	135-98-8	26.2	28.6
1,3-DICHLOROBENZENE	541-73-1	26.2	ND
4-ISOPROPYLTOLUENE	99-87-6	26.2	48.2
1,4-DICHLOROBENZENE	106-46-7	26.2	ND
N-BUTYLBENZENE	104-51-8	26.2	70.4
1,2-DICHLOROBENZENE	95-50-1	26.2	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	26.2	ND
1,2,4-TRICHLOROBENZENE	120-82-1	52.4	ND
HEXACHLOROBUTADIENE	87-68-3	52.4	ND
NAPHTHALENE	91-20-3	52.4	224
1,2,3-TRICHLOROBENZENE	87-61-6	52.4	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	89
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-27-3'  
LAB NO: 228950  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:00  
BATCH NO: 021122S1  
DATE ANALYZED: 02/25/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.85	ND
CHLOROMETHANE	74-87-3	1.85	ND
VINYL CHLORIDE	75-01-4	1.85	ND
BROMOMETHANE	74-83-9	1.85	ND
CHLOROETHANE	75-00-3	1.85	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.85	ND
1,1-DICHLOROETHENE	75-35-4	1.85	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.85	ND
METHYLENE CHLORIDE	75-09-2	9.23	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.85	ND
1,1-DICHLOROETHANE	75-34-3	1.85	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.85	ND
2,2-DICHLOROPROPANE	594-20-7	1.85	ND
BROMOCHLOROMETHANE	74-97-5	1.85	ND
CHLOROFORM	67-66-3	1.85	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.85	ND
CARBON TETRACHLORIDE	56-23-5	1.85	ND
1,1-DICHLOROPROPENE	563-58-6	1.85	ND
BENZENE	71-43-2	1.85	ND
1,2-DICHLOROETHANE	107-06-2	1.85	ND
TRICHLOROETHENE	79-01-6	1.85	ND
1,2-DICHLOROPROPANE	78-87-5	1.85	ND
DIBROMOMETHANE	74-95-3	1.85	ND
BROMODICHLOROMETHANE	75-27-4	1.85	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.85	ND
TOLUENE	108-88-3	1.85	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.85	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.85	ND
TETRACHLOROETHENE	127-18-4	1.85	ND
1,3-DICHLOROPROPANE	142-28-9	1.85	ND
DIBROMOCHLOROMETHANE	124-48-1	1.85	ND
1,2-DIBROMOETHANE	106-93-4	1.85	ND
CHLOROBENZENE	108-90-7	1.85	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.85	ND
ETHYLBENZENE	100-41-4	1.85	ND
XYLENE (M+P)	1330-20-7	1.85	ND
XYLENE (O)	1330-20-7	1.85	ND
STYRENE	100-42-5	1.85	ND
BROMOFORM	75-25-2	1.85	ND
ISOPROPYLBENZENE	98-82-8	1.85	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.85	ND
BROMOBENZENE	108-86-1	1.85	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.85	ND
N-PROPYLBENZENE	103-65-1	1.85	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-27-3'**  
**LAB NO: 228950**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:00**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.85	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.85	ND
4-CHLOROTOLUENE	106-43-4	1.85	ND
TERT-BUTYLBENZENE	98-06-6	1.85	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.85	ND
SEC-BUTYLBENZENE	135-98-8	1.85	ND
1,3-DICHLOROBENZENE	541-73-1	1.85	ND
4-ISOPROPYLTOLUENE	99-87-6	1.85	ND
1,4-DICHLOROBENZENE	106-46-7	1.85	ND
N-BUTYLBENZENE	104-51-8	1.85	ND
1,2-DICHLOROBENZENE	95-50-1	1.85	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.85	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.69	ND
HEXACHLOROBUTADIENE	87-68-3	3.69	ND
NAPHTHALENE	91-20-3	3.69	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.69	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	95
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	94

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-27-6'  
LAB NO: 228951  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:20  
BATCH NO: 021122S1  
DATE ANALYZED: 02/25/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.71	ND
CHLOROMETHANE	74-87-3	1.71	ND
VINYL CHLORIDE	75-01-4	1.71	ND
BROMOMETHANE	74-83-9	1.71	ND
CHLOROETHANE	75-00-3	1.71	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.71	ND
1,1-DICHLOROETHENE	75-35-4	1.71	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.71	ND
METHYLENE CHLORIDE	75-09-2	8.55	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.71	ND
1,1-DICHLOROETHANE	75-34-3	1.71	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.71	ND
2,2-DICHLOROPROPANE	594-20-7	1.71	ND
BROMOCHLOROMETHANE	74-97-5	1.71	ND
CHLOROFORM	67-66-3	1.71	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.71	ND
CARBON TETRACHLORIDE	56-23-5	1.71	ND
1,1-DICHLOROPROPENE	563-58-6	1.71	ND
BENZENE	71-43-2	1.71	ND
1,2-DICHLOROETHANE	107-06-2	1.71	ND
TRICHLOROETHENE	79-01-6	1.71	ND
1,2-DICHLOROPROPANE	78-87-5	1.71	ND
DIBROMOMETHANE	74-95-3	1.71	ND
BROMODICHLOROMETHANE	75-27-4	1.71	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.71	ND
TOLUENE	108-88-3	1.71	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.71	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.71	ND
TETRACHLOROETHENE	127-18-4	1.71	ND
1,3-DICHLOROPROPANE	142-28-9	1.71	ND
DIBROMOCHLOROMETHANE	124-48-1	1.71	ND
1,2-DIBROMOETHANE	106-93-4	1.71	ND
CHLOROBENZENE	108-90-7	1.71	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.71	ND
ETHYLBENZENE	100-41-4	1.71	ND
XYLENE (M+P)	1330-20-7	1.71	ND
XYLENE (O)	1330-20-7	1.71	ND
STYRENE	100-42-5	1.71	ND
BROMOFORM	75-25-2	1.71	ND
ISOPROPYLBENZENE	98-82-8	1.71	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.71	ND
BROMOBENZENE	108-86-1	1.71	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.71	ND
N-PROPYLBENZENE	103-65-1	1.71	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-27-6'**  
**LAB NO: 228951**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:20**  
**BATCH NO: 021122S1**  
**DATE ANALYZED: 02/25/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.71	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.71	ND
4-CHLOROTOLUENE	106-43-4	1.71	ND
TERT-BUTYLBENZENE	98-06-6	1.71	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.71	ND
SEC-BUTYLBENZENE	135-98-8	1.71	ND
1,3-DICHLOROBENZENE	541-73-1	1.71	ND
4-ISOPROPYLTOLUENE	99-87-6	1.71	ND
1,4-DICHLOROBENZENE	106-46-7	1.71	ND
N-BUTYLBENZENE	104-51-8	1.71	ND
1,2-DICHLOROBENZENE	95-50-1	1.71	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.71	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.42	ND
HEXACHLOROBUTADIENE	87-68-3	3.42	ND
NAPHTHALENE	91-20-3	3.42	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.42	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	107
TOLUENE-D8	102
4-BROMOFLUOROBENZENE	104

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: W-27-10'  
LAB NO: 228952  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:30  
BATCH NO: 022222S1  
DATE ANALYZED: 02/26/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	2.40	ND
CHLOROMETHANE	74-87-3	2.40	ND
VINYL CHLORIDE	75-01-4	2.40	ND
BROMOMETHANE	74-83-9	2.40	ND
CHLOROETHANE	75-00-3	2.40	ND
TRICHLOROFLUOROMETHANE	75-69-4	2.40	ND
1,1-DICHLOROETHENE	75-35-4	2.40	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	2.40	ND
METHYLENE CHLORIDE	75-09-2	12.0	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	2.40	ND
1,1-DICHLOROETHANE	75-34-3	2.40	ND
CIS-1,2-DICHLOROETHENE	156-59-2	2.40	ND
2,2-DICHLOROPROPANE	594-20-7	2.40	ND
BROMOCHLOROMETHANE	74-97-5	2.40	ND
CHLOROFORM	67-66-3	2.40	ND
1,1,1-TRICHLOROETHANE	71-55-6	2.40	ND
CARBON TETRACHLORIDE	56-23-5	2.40	ND
1,1-DICHLOROPROPENE	563-58-6	2.40	ND
BENZENE	71-43-2	2.40	ND
1,2-DICHLOROETHANE	107-06-2	2.40	ND
TRICHLOROETHENE	79-01-6	2.40	ND
1,2-DICHLOROPROPANE	78-87-5	2.40	ND
DIBROMOMETHANE	74-95-3	2.40	ND
BROMODICHLOROMETHANE	75-27-4	2.40	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	2.40	ND
TOLUENE	108-88-3	2.40	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	2.40	ND
1,1,2-TRICHLOROETHANE	79-00-5	2.40	ND
TETRACHLOROETHENE	127-18-4	2.40	ND
1,3-DICHLOROPROPANE	142-28-9	2.40	ND
DIBROMOCHLOROMETHANE	124-48-1	2.40	ND
1,2-DIBROMOETHANE	106-93-4	2.40	ND
CHLOROBENZENE	108-90-7	2.40	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	2.40	ND
ETHYLBENZENE	100-41-4	2.40	ND
XYLENE (M+P)	1330-20-7	2.40	ND
XYLENE (O)	1330-20-7	2.40	ND
STYRENE	100-42-5	2.40	ND
BROMOFORM	75-25-2	2.40	ND
ISOPROPYLBENZENE	98-82-8	2.40	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	2.40	ND
BROMOBENZENE	108-86-1	2.40	ND
1,2,3-TRICHLOROPROPANE	96-18-4	2.40	ND
N-PROPYLBENZENE	103-65-1	2.40	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: W-27-10'**  
**LAB NO: 228952**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:30**  
**BATCH NO: 022222S1**

**DATE ANALYZED: 02/26/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	2.40	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	2.40	ND
4-CHLOROTOLUENE	106-43-4	2.40	ND
TERT-BUTYLBENZENE	98-06-6	2.40	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	2.40	ND
SEC-BUTYLBENZENE	135-98-8	2.40	ND
1,3-DICHLOROBENZENE	541-73-1	2.40	ND
4-ISOPROPYLTOLUENE	99-87-6	2.40	ND
1,4-DICHLOROBENZENE	106-46-7	2.40	ND
N-BUTYLBENZENE	104-51-8	2.40	ND
1,2-DICHLOROBENZENE	95-50-1	2.40	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	2.40	ND
1,2,4-TRICHLOROBENZENE	120-82-1	4.79	ND
HEXACHLOROBUTADIENE	87-68-3	4.79	ND
NAPHTHALENE	91-20-3	4.79	ND
1,2,3-TRICHLOROBENZENE	87-61-6	4.79	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	94
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	100

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK

SAMPLE ID: 022322-SOIL  
LAB NO: 228953  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 01:00  
BATCH NO: 022222S1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260

SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.54	ND
CHLOROMETHANE	74-87-3	1.54	ND
VINYL CHLORIDE	75-01-4	1.54	ND
BROMOMETHANE	74-83-9	1.54	ND
CHLOROETHANE	75-00-3	1.54	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.54	ND
1,1-DICHLOROETHENE	75-35-4	1.54	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.54	ND
METHYLENE CHLORIDE	75-09-2	7.68	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.54	ND
1,1-DICHLOROETHANE	75-34-3	1.54	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.54	ND
2,2-DICHLOROPROPANE	594-20-7	1.54	ND
BROMOCHLOROMETHANE	74-97-5	1.54	ND
CHLOROFORM	67-66-3	1.54	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.54	ND
CARBON TETRACHLORIDE	56-23-5	1.54	ND
1,1-DICHLOROPROPENE	563-58-6	1.54	ND
BENZENE	71-43-2	1.54	ND
1,2-DICHLOROETHANE	107-06-2	1.54	5.24
TRICHLOROETHENE	79-01-6	1.54	ND
1,2-DICHLOROPROPANE	78-87-5	1.54	ND
DIBROMOMETHANE	74-95-3	1.54	ND
BROMODICHLOROMETHANE	75-27-4	1.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.54	ND
TOLUENE	108-88-3	1.54	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.54	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.54	ND
TETRACHLOROETHENE	127-18-4	1.54	ND
1,3-DICHLOROPROPANE	142-28-9	1.54	ND
DIBROMOCHLOROMETHANE	124-48-1	1.54	ND
1,2-DIBROMOETHANE	106-93-4	1.54	ND
CHLOROBENZENE	108-90-7	1.54	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.54	ND
ETHYLBENZENE	100-41-4	1.54	ND
XYLENE (M+P)	1330-20-7	1.54	ND
XYLENE (O)	1330-20-7	1.54	ND
STYRENE	100-42-5	1.54	ND
BROMOFORM	75-25-2	1.54	ND
ISOPROPYLBENZENE	98-82-8	1.54	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.54	ND
BROMOBENZENE	108-86-1	1.54	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.54	ND
N-PROPYLBENZENE	103-65-1	1.54	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK**

**SAMPLE ID: 022322-SOIL**  
**LAB NO: 228953**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 01:00**  
**BATCH NO: 022222S1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5035/8260**

**SAMPLE TYPE: SOIL**  
**UNITS: µg/Kg**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.54	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.54	ND
4-CHLOROTOLUENE	106-43-4	1.54	ND
TERT-BUTYLBENZENE	98-06-6	1.54	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.54	ND
SEC-BUTYLBENZENE	135-98-8	1.54	ND
1,3-DICHLOROBENZENE	541-73-1	1.54	ND
4-ISOPROPYLTOLUENE	99-87-6	1.54	ND
1,4-DICHLOROBENZENE	106-46-7	1.54	ND
N-BUTYLBENZENE	104-51-8	1.54	ND
1,2-DICHLOROBENZENE	95-50-1	1.54	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.54	ND
1,2,4-TRICHLOROBENZENE	120-82-1	3.07	ND
HEXACHLOROBUTADIENE	87-68-3	3.07	ND
NAPHTHALENE	91-20-3	3.07	ND
1,2,3-TRICHLOROBENZENE	87-61-6	3.07	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	94
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	101

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021122S1

BATCH NO: 021122S1

DATE ANALYZED: 02/11/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: SOIL

REFERENCE: EPA 5035/8260

UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.25	ND
CHLOROMETHANE	74-87-3	1.25	ND
VINYL CHLORIDE	75-01-4	1.25	ND
BROMOMETHANE	74-83-9	1.25	ND
CHLOROETHANE	75-00-3	1.25	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.25	ND
1,1-DICHLOROETHENE	75-35-4	1.25	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.25	ND
METHYLENE CHLORIDE	75-09-2	6.25	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.25	ND
1,1-DICHLOROETHANE	75-34-3	1.25	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.25	ND
2,2-DICHLOROPROPANE	594-20-7	1.25	ND
BROMOCHLOROMETHANE	74-97-5	1.25	ND
CHLOROFORM	67-66-3	1.25	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.25	ND
CARBON TETRACHLORIDE	56-23-5	1.25	ND
1,1-DICHLOROPROPENE	563-58-6	1.25	ND
BENZENE	71-43-2	1.25	ND
1,2-DICHLOROETHANE	107-06-2	1.25	ND
TRICHLOROETHENE	79-01-6	1.25	ND
1,2-DICHLOROPROPANE	78-87-5	1.25	ND
DIBROMOMETHANE	74-95-3	1.25	ND
BROMODICHLOROMETHANE	75-27-4	1.25	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.25	ND
TOLUENE	108-88-3	1.25	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.25	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.25	ND
TETRACHLOROETHENE	127-18-4	1.25	ND
1,3-DICHLOROPROPANE	142-28-9	1.25	ND
DIBROMOCHLOROMETHANE	124-48-1	1.25	ND
1,2-DIBROMOETHANE	106-93-4	1.25	ND
CHLOROBENZENE	108-90-7	1.25	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.25	ND
ETHYLBENZENE	100-41-4	1.25	ND
XYLENE (M+P)	1330-20-7	1.25	ND
XYLENE (O)	1330-20-7	1.25	ND
STYRENE	100-42-5	1.25	ND
BROMOFORM	75-25-2	1.25	ND
ISOPROPYLBENZENE	98-82-8	1.25	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.25	ND
BROMOBENZENE	108-86-1	1.25	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.25	ND
N-PROPYLBENZENE	103-65-1	1.25	ND
2-CHLOROTOLUENE	95-49-8	1.25	ND



**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021122S1

BATCH NO: 021122S1

DATE ANALYZED: 02/11/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5035/8260SAMPLE TYPE: SOIL  
UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	1.25	ND
4-CHLOROTOLUENE	106-43-4	1.25	ND
TERT-BUTYLBENZENE	98-06-6	1.25	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.25	ND
SEC-BUTYLBENZENE	135-98-8	1.25	ND
1,3-DICHLOROBENZENE	541-73-1	1.25	ND
4-ISOPROPYLTOLUENE	99-87-6	1.25	ND
1,4-DICHLOROBENZENE	106-46-7	1.25	ND
N-BUTYLBENZENE	104-51-8	1.25	ND
1,2-DICHLOROBENZENE	95-50-1	1.25	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.25	ND
1,2,4-TRICHLOROBENZENE	120-82-1	2.50	ND
HEXACHLOROBUTADIENE	87-68-3	2.50	ND
NAPHTHALENE	91-20-3	2.50	ND
1,2,3-TRICHLOROBENZENE	87-61-6	2.50	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	92
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**SAMPLE ID:** B021122S1  
**SPIKE ID:** L021122S1  
**DUPLICATE ID:** D021122S1  
**BATCH NO:** 021122S1  
**DATE ANALYZED:** 02/11/2022  
**SAMPLE TYPE:** SOIL  
**UNITS:** µg/Kg

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5035/8260

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
1,1 DICHLOROETHENE	30.0	ND	19.9	66	60-140
BENZENE	30.0	ND	21.0	70	60-140
TRICHLOROETHENE	30.0	ND	22.1	74	60-140
TOLUENE	30.0	ND	22.4	75	60-140
CHLOROBENZENE	30.0	ND	20.9	70	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
1,1 DICHLOROETHENE	1.25	19.9	19.8	0.7	±20
BENZENE	1.25	21.0	20.8	1.2	±20
TRICHLOROETHENE	1.25	22.1	21.9	0.9	±20
TOLUENE	1.25	22.4	22.0	1.9	±20
CHLOROBENZENE	1.25	20.9	20.4	2.6	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B022222S1

BATCH NO: 022222S1

DATE ANALYZED: 02/22/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: SOIL

REFERENCE: EPA 5035/8260

UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.25	ND
CHLOROMETHANE	74-87-3	1.25	ND
VINYL CHLORIDE	75-01-4	1.25	ND
BROMOMETHANE	74-83-9	1.25	ND
CHLOROETHANE	75-00-3	1.25	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.25	ND
1,1-DICHLOROETHENE	75-35-4	1.25	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.25	ND
METHYLENE CHLORIDE	75-09-2	6.25	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.25	ND
1,1-DICHLOROETHANE	75-34-3	1.25	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.25	ND
2,2-DICHLOROPROPANE	594-20-7	1.25	ND
BROMOCHLOROMETHANE	74-97-5	1.25	ND
CHLOROFORM	67-66-3	1.25	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.25	ND
CARBON TETRACHLORIDE	56-23-5	1.25	ND
1,1-DICHLOROPROPENE	563-58-6	1.25	ND
BENZENE	71-43-2	1.25	ND
1,2-DICHLOROETHANE	107-06-2	1.25	ND
TRICHLOROETHENE	79-01-6	1.25	ND
1,2-DICHLOROPROPANE	78-87-5	1.25	ND
DIBROMOMETHANE	74-95-3	1.25	ND
BROMODICHLOROMETHANE	75-27-4	1.25	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.25	ND
TOLUENE	108-88-3	1.25	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.25	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.25	ND
TETRACHLOROETHENE	127-18-4	1.25	ND
1,3-DICHLOROPROPANE	142-28-9	1.25	ND
DIBROMOCHLOROMETHANE	124-48-1	1.25	ND
1,2-DIBROMOETHANE	106-93-4	1.25	ND
CHLOROBENZENE	108-90-7	1.25	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.25	ND
ETHYLBENZENE	100-41-4	1.25	ND
XYLENE (M+P)	1330-20-7	1.25	ND
XYLENE (O)	1330-20-7	1.25	ND
STYRENE	100-42-5	1.25	ND
BROMOFORM	75-25-2	1.25	ND
ISOPROPYLBENZENE	98-82-8	1.25	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.25	ND
BROMOBENZENE	108-86-1	1.25	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.25	ND
N-PROPYLBENZENE	103-65-1	1.25	ND
2-CHLOROTOLUENE	95-49-8	1.25	ND

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B022222S1

BATCH NO: 022222S1

DATE ANALYZED: 02/22/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: SOIL

REFERENCE: EPA 5035/8260

UNITS: µg/Kg

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	1.25	ND
4-CHLOROTOLUENE	106-43-4	1.25	ND
TERT-BUTYLBENZENE	98-06-6	1.25	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.25	ND
SEC-BUTYLBENZENE	135-98-8	1.25	ND
1,3-DICHLOROBENZENE	541-73-1	1.25	ND
4-ISOPROPYLTOLUENE	99-87-6	1.25	ND
1,4-DICHLOROBENZENE	106-46-7	1.25	ND
N-BUTYLBENZENE	104-51-8	1.25	ND
1,2-DICHLOROBENZENE	95-50-1	1.25	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.25	ND
1,2,4-TRICHLOROBENZENE	120-82-1	2.50	ND
HEXACHLOROBUTADIENE	87-68-3	2.50	ND
NAPHTHALENE	91-20-3	2.50	ND
1,2,3-TRICHLOROBENZENE	87-61-6	2.50	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	96
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	92

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**SAMPLE ID:** B02222S1  
**SPIKE ID:** L02222S1  
**DUPLICATE ID:** D02222S1  
**BATCH NO:** 02222S1  
**DATE ANALYZED:** 02/22/2022  
**SAMPLE TYPE:** SOIL  
**UNITS:** µg/Kg

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5035/8260

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
1,1 DICHLOROETHENE	30.0	ND	23.5	78	60-140
BENZENE	30.0	ND	25.2	84	60-140
TRICHLOROETHENE	30.0	ND	23.7	79	60-140
TOLUENE	30.0	ND	25.1	84	60-140
CHLOROBENZENE	30.0	ND	24.0	80	60-140

**PRECISION (SPIKE DUPLICATE)**

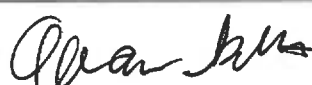
COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
1,1 DICHLOROETHENE	1.25	23.5	23.9	1.4	±20
BENZENE	1.25	25.2	25.3	0.7	±20
TRICHLOROETHENE	1.25	23.7	23.8	0.5	±20
TOLUENE	1.25	25.1	25.2	0.5	±20
CHLOROBENZENE	1.25	24.0	24.5	1.8	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

## SAMPLE ANALYSIS/COMPOSITE REQUEST FORM

### CHAIN-OF-CUSTODY

Invoice to: WEST, Inc.		Date: <u>2/23/22</u> Page <u>1</u> of <u>1</u>															
Project: <u>Regis. Hayward Park; WO 21.02 Task 2</u>		Location: <u>401 Concar Dr., San Mateo, CA</u>															
Project Manager: <u>Sharon Squire, WEST, Inc.</u>		Phone: <u>415/460-6770</u> Fax: <u>415/460-6771</u>															
Laboratory: <u>KPrime, Inc, Santa Rosa, CA</u>		Turnaround time (days)															
Sampler Signature: 		<table border="1"> <tr> <td>1</td> <td>2</td> <td>3</td> <td>5</td> <td>7</td> <td>10</td> <td>Std.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> </tr> </table>		1	2	3	5	7	10	Std.							X
1	2	3	5	7	10	Std.											
						X											

### Analyses Requested

Sample ID	KPI #	Date	Time	Type	# Containers	Composite	VOCs including naphthalene (5035/8260B)	Encore Sample Preparation	EDF											HOLD
W-25-0.5'	228941	2/23/22	0940	S	1	-	X	X	X											
W-25-3'	228942	2/23/22	0955	S	1	-	X	X	X											
W-25-6'	228943	2/23/22	1002	S	1	-	X	X	X											
W-25-10'	228944	2/23/22	1017	S	1	-	X	X	X											
W-26-0.5'	228945	2/23/22	1008	S	1	-	X	X	X											
W-26-3'	228946	2/23/22	1024	S	1	-	X	X	X											
W-26-6'	228947	2/23/22	1033	S	1	-	X	X	X											
W-26-10'	228948	2/23/22	1053	S	1	-	X	X	X											
W-27-4	228949	2/23/22	0910	S	1	-	X	X	X											
W-27-3'	228950	2/23/22	0900	S	1	-	X	X	X											
W-27-6'	228951	2/23/22	0920	S	1	-	X	X	X											
W-27-10'	228952	2/23/22	0930	S	1	-	X	X	X											
022322-soil	228953	2/23/22	0100	S	1	-	X	X	X											

NOTES: Dispose after 30-days



Log Code: WESS

Global ID: T10000008604


Relinquished by: (Signature)



Date/Time

2/23/22 1305

Received by: (Signature)



Date/Time

2/23/22 1305

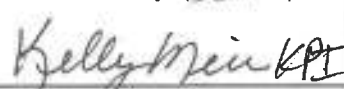
Relinquished by: (Signature)



Date/Time

2/23/22 1638

Received by: (Signature)



Date/Time

2/23/22 1638





K PRIME INC.

## LABORATORY TEST REPORT

**ACCT:** 9946

**TO:** MS. SHARON SQUIRE  
WEST ENVIRONMENTAL S&T  
711 GRAND AVENUE, SUITE 220  
SAN RAFAEL, CA 94901

Phone: 415-460-6770  
Email: [main@westenvironmental.com](mailto:main@westenvironmental.com)

**FROM:** Richard A. Kagel, Ph.D. *RAK 3/4/2022*  
Laboratory Director

**SUBJECT:** LABORATORY RESULTS FOR YOUR PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

The following samples were received at our laboratory on February 25, 2022.

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
W-28-4'	AIR	2/25/2022	10:41	229084
W-29-4'	AIR	2/25/2022	9:44	229085
W-30-4'	AIR	2/25/2022	8:53	229086
W-32-4'	AIR	2/24/2022	15:47	229087
W-34-4'	AIR	2/24/2022	11:15	229088
W-35-4'	AIR	2/24/2022	14:08	229089
W-36-2.5'	AIR	2/24/2022	14:53	229090
W-37-4'	AIR	2/25/2022	7:50	229091
022522-4'	AIR	2/25/2022	1:00	229092

Test results included in this report meet the requirements of ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board (ANAB), and/or the requirements of the California Environmental Laboratory Accreditation Program (CA-ELAP), as applicable. Refer to certificates and scopes of accreditation AT-1427 (ANAB) and CA-ELAP #1532.

Results relate only to the samples tested. This test report shall not be reproduced except in full, without written permission of the laboratory.

If there are questions or concerns regarding this report, please contact your laboratory representative.

**K Prime, Inc.**

3621 Westwind Blvd.  
Santa Rosa, CA 95403

Tel: (707)-527-7574 Fax: (707)-527-7879

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-28-4'  
LAB NO: 229084  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/25/2022  
TIME SAMPLED: 10:41  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	4.14	2.07	8.55
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	2.52	2.64	6.65
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	89.2	3.19	285
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	32.4	3.77	122
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	22.0	4.34	95.4
XYLENE (M+P)	179601-23-1	2.00	81.3	8.68	353
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	43.3	4.34	188
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	48.1	4.92	237
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	124	4.92	611
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	29.3	5.24	154
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: \_\_\_\_\_  
DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**METHOD: VOCs IN AIR**  
**REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)**

**SAMPLE ID:** W-29-4'  
**LAB NO:** 229085  
**SAMPLE TYPE:** AIR  
**DATE SAMPLED:** 2/25/2022  
**TIME SAMPLED:** 9:44  
**BATCH ID:** 022422A1  
**DATE ANALYZED:** 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	45.2	3.19	145
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	41.2	3.77	155
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	10.6	4.34	46.0
XYLENE (M+P)	179601-23-1	2.00	17.0	8.68	73.8
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	9.90	4.34	43.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	1.13	4.92	5.56
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	2.59	4.92	12.7
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	1.30	5.24	6.81
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: \_\_\_\_\_

DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-30-4'  
LAB NO: 229086  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/25/2022  
TIME SAMPLED: 08:53  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1 1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1 2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1 1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1 2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1 1 1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1 2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	10.7	3.19	34.0
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1 2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1 3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1 3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	10.1	3.77	38.2
1 1 2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1 2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	31.8	4.34	138
XYLENE (M+P)	179601-23-1	2.00	24.1	8.68	105
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	24.9	4.34	108
1 1 2 2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1 3 5-TRIMETHYLBENZENE	108-67-8	1.00	4.46	4.92	21.9
1 2 4-TRIMETHYLBENZENE	95-63-6	1.00	5.64	4.92	27.7
1 3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1 4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1 2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1 2 4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	5.67	5.24	29.7
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY:

DATE: 3/3/22

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-32-4'  
LAB NO: 229087  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/24/2022  
TIME SAMPLED: 15:47  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	34.6	3.19	111
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	2.01	4.62	9.29
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	89.0	3.77	335
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	27.0	4.34	117
XYLENE (M+P)	179601-23-1	2.00	51.8	8.68	225
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	22.2	4.34	96.5
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	27.9	4.92	137
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	41.6	4.92	204
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	1.98	5.24	10.4
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY:   
DATE: 3/3/22

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-34-4'  
LAB NO: 229088  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/24/2022  
TIME SAMPLED: 11:15  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	10.0	ND	49.5	ND
CHLOROMETHANE	74-87-3	10.0	ND	20.7	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	10.0	ND	69.9	ND
VINYL CHLORIDE	75-01-4	10.0	38.1	25.6	97.3
BROMOMETHANE	74-83-9	10.0	ND	38.8	ND
CHLOROETHANE	75-00-3	10.0	71.1	26.4	188
TRICHLOROFLUOROMETHANE	75-69-4	10.0	ND	56.2	ND
1,1-DICHLOROETHENE	75-35-4	10.0	70.0	39.7	277
TRICHLOROTRIFLUOROETHANE	76-13-1	10.0	ND	76.6	ND
METHYLENE CHLORIDE	75-09-2	10.0	ND	34.7	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	10.0	27.4	39.6	109
1,1-DICHLOROETHANE	75-34-3	10.0	ND	40.5	ND
CIS-1,2-DICHLOROETHENE	156-59-2	10.0	11.3	39.7	44.8
CHLOROFORM	67-66-3	10.0	ND	48.8	ND
1,1,1-TRICHLOROETHANE	71-55-6	10.0	ND	54.6	ND
1,2-DICHLOROETHANE	107-06-2	10.0	441	40.5	1780
BENZENE	71-43-2	10.0	84.8	31.9	271
CARBON TETRACHLORIDE	56-23-5	10.0	ND	62.9	ND
1,2-DICHLOROPROPANE	78-87-5	10.0	ND	46.2	ND
TRICHLOROETHENE	79-01-6	10.0	19.1	53.7	103
CIS-1,3-DICHLOROPROPENE	10061-01-5	10.0	ND	45.4	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	10.0	ND	45.4	ND
TOLUENE	108-88-3	10.0	43.0	37.7	162
1,1,2-TRICHLOROETHANE	79-00-5	10.0	ND	54.6	ND
1,2-DIBROMOETHANE	106-93-4	10.0	ND	76.8	ND
TETRACHLOROETHENE	127-18-4	10.0	ND	67.8	ND
CHLOROBENZENE	108-90-7	10.0	ND	46.0	ND
ETHYLBENZENE	100-41-4	10.0	28.5	43.4	124
XYLENE (M+P)	179601-23-1	20.0	ND	86.8	ND
STYRENE	100-42-5	10.0	ND	42.6	ND
XYLENE (O)	95-47-6	10.0	ND	43.4	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	10.0	ND	68.7	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	10.0	ND	49.2	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	10.0	ND	49.2	ND
1,3-DICHLOROBENZENE	541-73-1	10.0	ND	60.1	ND
1,4-DICHLOROBENZENE	108-46-7	10.0	ND	60.1	ND
1,2-DICHLOROBENZENE	95-50-1	10.0	ND	60.1	ND
1,2,4-TRICHLOROBENZENE	120-82-1	10.0	ND	74.2	ND
NAPHTHALENE	91-20-3	10.0	ND	52.4	ND
HEXACHLOROBUTADIENE	87-68-3	10.0	ND	107	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: \_\_\_\_\_  
DATE: 3/3/22

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-35-4'  
LAB NO: 229089  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/24/2022  
TIME SAMPLED: 14:08  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	5.20	2.64	13.7
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	5.29	3.19	16.9
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	15.5	3.77	58.6
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	2.11	4.34	9.16
XYLENE (M+P)	179601-23-1	2.00	5.08	8.68	22.1
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	1.49	4.34	6.47
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	1.11	4.92	5.46
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	ND	5.24	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: 

DATE: 3/2/22



**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: VOCs IN AIR  
REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)

SAMPLE ID: W-36-2.5'  
LAB NO: 229090  
SAMPLE TYPE: AIR  
DATE SAMPLED: 2/24/2022  
TIME SAMPLED: 14:53  
BATCH ID: 022422A1  
DATE ANALYZED: 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	3.24	3.19	10.4
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	15.3	3.77	57.7
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	1.29	4.34	5.60
XYLENE (M+P)	179601-23-1	2.00	3.10	8.68	13.5
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	ND	4.34	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	ND	5.24	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: \_\_\_\_\_  
DATE: 3/2

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**METHOD: VOCs IN AIR**  
**REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)**

**SAMPLE ID:** W-37-4'  
**LAB NO:** 229091  
**SAMPLE TYPE:** AIR  
**DATE SAMPLED:** 2/25/2022  
**TIME SAMPLED:** 07:50  
**BATCH ID:** 022422A1  
**DATE ANALYZED:** 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	ND	2.07	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	ND	2.64	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	3.27	3.19	10.4
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	10.3	3.77	38.7
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	1.41	4.34	6.12
XYLENE (M+P)	179601-23-1	2.00	ND	8.68	ND
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	ND	4.34	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	ND	4.92	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	ND	4.92	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	ND	5.24	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY: \_\_\_\_\_  
DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**  
**METHOD: VOCs IN AIR**  
**REFERENCE: EPA METHOD TO 15 (GC-MS-SCAN)**

**SAMPLE ID:** 022522-4'  
**LAB NO:** 229092  
**SAMPLE TYPE:** AIR  
**DATE SAMPLED:** 2/25/2022  
**TIME SAMPLED:** 01:00  
**BATCH ID:** 022422A1  
**DATE ANALYZED:** 3/2/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND	4.95	ND
CHLOROMETHANE	74-87-3	1.00	4.10	2.07	8.47
DICHLOROTETRAFLUOROETHANE	76-14-2	1.00	ND	6.99	ND
VINYL CHLORIDE	75-01-4	1.00	ND	2.56	ND
BROMOMETHANE	74-83-9	1.00	ND	3.88	ND
CHLOROETHANE	75-00-3	1.00	2.40	2.64	6.33
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND	5.62	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND	3.97	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND	7.66	ND
METHYLENE CHLORIDE	75-09-2	1.00	ND	3.47	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND	3.96	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND	4.05	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND	3.97	ND
CHLOROFORM	67-66-3	1.00	ND	4.88	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND	5.46	ND
1,2-DICHLOROETHANE	107-06-2	1.00	ND	4.05	ND
BENZENE	71-43-2	1.00	88.5	3.19	283
CARBON TETRACHLORIDE	56-23-5	1.00	ND	6.29	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND	4.62	ND
TRICHLOROETHENE	79-01-6	1.00	ND	5.37	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND	4.54	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND	4.54	ND
TOLUENE	108-88-3	1.00	31.7	3.77	119
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND	5.46	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND	7.68	ND
TETRACHLOROETHENE	127-18-4	1.00	ND	6.78	ND
CHLOROBENZENE	108-90-7	1.00	ND	4.60	ND
ETHYLBENZENE	100-41-4	1.00	21.3	4.34	92.4
XYLENE (M+P)	179601-23-1	2.00	79.2	8.68	344
STYRENE	100-42-5	1.00	ND	4.26	ND
XYLENE (O)	95-47-6	1.00	42.2	4.34	183
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND	6.87	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	46.8	4.92	230
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	123	4.92	604
1,3-DICHLOROBENZENE	541-73-1	1.00	ND	6.01	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND	6.01	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND	6.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND	7.42	ND
NAPHTHALENE	91-20-3	1.00	33.5	5.24	175
HEXACHLOROBUTADIENE	87-68-3	1.00	ND	10.7	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

RL - REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

APPROVED BY:   
DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**METHOD: HELIUM**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

SAMPLE ID	LAB NO	BATCH NO	DATE SAMPLED	TIME SAMPLED	DATE ANALYZED	MRL	SAMPLE CONC
W-28-4'	229084	022822A3	02/25/2022	10:41	02/28/2022	0.100	ND
W-29-4'	229085	022822A3	02/25/2022	09:44	02/28/2022	0.100	ND
W-30-4'	229086	022822A3	02/25/2022	08:53	02/28/2022	0.100	ND
W-32-4'	229087	022822A3	02/24/2022	15:47	02/28/2022	0.100	ND
W-34-4'	229088	022822A3	02/24/2022	11:15	02/28/2022	0.150	ND
W-35-4'	229089	022822A3	02/24/2022	14:08	02/28/2022	0.100	ND
W-36-2.5'	229090	022822A3	02/24/2022	14:53	02/28/2022	0.100	ND
W-37-4'	229091	022822A3	02/25/2022	07:50	02/28/2022	0.100	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE  
MRL - METHOD REPORTING LIMIT

APPROVED BY: 

DATE: 3/2/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-28-4'**  
**LAB NO: 229084**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/25/2022**  
**TIME SAMPLED: 10:41**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**


COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	0.357
OXYGEN	1.00	19.4

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-29-4'**  
**LAB NO: 229085**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/25/2022**  
**TIME SAMPLED: 09:44**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	0.235
OXYGEN	1.00	12.0

**NOTES:**  
ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_  
DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-30-4'**  
**LAB NO: 229086**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/25/2022**  
**TIME SAMPLED: 08:53**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	26.8
OXYGEN	1.00	5.12

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: 3/3/22



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-32-4'**  
**LAB NO: 229087**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 15:47**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	5.23
OXYGEN	1.00	14.7

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-34-4'**  
**LAB NO: 229088**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 11:15**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.150	25.7
OXYGEN	1.50	10.6

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_  
DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-35-4'**  
**LAB NO: 229089**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 14:08**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	ND
OXYGEN	1.00	21.5

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-36-2.5'**  
**LAB NO: 229090**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 14:53**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	1.38
OXYGEN	1.00	14.7

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-37-4'**  
**LAB NO: 229091**  
**BATCH NO: 030122A2**  
**DATE SAMPLED: 02/25/2022**  
**TIME SAMPLED: 07:50**  
**DATE ANALYZED: 03/01/2022**

**METHOD: METHANE, OXYGEN**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
METHANE	0.100	6.32
OXYGEN	1.00	5.44

**NOTES:**  
ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**METHOD: CARBON DIOXIDE**  
**REFERENCE: ASTM D 1946**

**SAMPLE TYPE: AIR**  
**UNITS: %-V**

SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH NO	DATE ANALYZED	MRL	SAMPLE CONC
W-28-4'	229084	02/25/2022	10:41	022822A2	2/28/2022	0.100	0.251
W-29-4'	229085	02/25/2022	09:44	022822A2	2/28/2022	0.100	4.11
W-30-4'	229086	02/25/2022	08:53	022822A2	2/28/2022	0.100	ND
W-32-4'	229087	02/24/2022	15:47	022822A2	2/28/2022	0.100	ND
W-34-4'	229088	02/24/2022	11:15	022822A2	2/28/2022	0.150	4.76
W-35-4'	229089	02/24/2022	14:08	022822A2	2/28/2022	0.100	0.839
W-36-2.5'	229090	02/24/2022	14:53	022822A2	2/28/2022	0.100	0.595
W-37-4'	229091	02/25/2022	07:50	022822A2	2/28/2022	0.100	0.869

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE  
MRL - METHOD REPORTING LIMIT

APPROVED BY: \_\_\_\_\_

DATE: 3/2/22

**K PRIME, INC.**  
**LABORATORY REPORT**

**SUMMA PRESSURE MEASURED UPON SAMPLE RECEIPT**

**K PRIME PROJECT: 9946**

**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

LAB NO.	SAMPLE ID	DATE REC'D	DATE TESTED	PRESSURE
229084	W-28-4'	2/25/2022	2/28/2022	-4
229085	W-29-4'	2/25/2022	2/28/2022	-6
229086	W-30-4'	2/25/2022	2/28/2022	-4
229087	W-32-4'	2/25/2022	2/28/2022	-4
229088	W-34-4'	2/25/2022	2/28/2022	-16
229089	W-35-4'	2/25/2022	2/28/2022	-6
229090	W-36-2.5'	2/25/2022	2/28/2022	-3
229091	W-37-4'	2/25/2022	2/28/2022	-3
229092	022522-4'	2/25/2022	2/28/2022	-4

**NOTES:**

NEGATIVE PRESSURE VALUES ARE IN INHG(INCHES OF MERCURY)

POSITIVE PRESSURE VALUES ARE IN PSIG

APPROVED BY: 

DATE: 2/28/22



**K PRIME, INC.**  
**LABORATORY METHOD BLANK REPORT**

**METHOD BLANK ID:** B022422A1  
**SAMPLE TYPE:** AIR

**METHOD:** VOCs IN AIR  
**REFERENCE:** EPA METHOD TO 15 (GC-MS-SCAN)

**BATCH ID:** 022422A1  
**DATE ANALYZED:** 2/24/2022

COMPOUND NAME	CAS NO.	PPB (V/V)		µg/cu. m	
		RL	SAMPLE CONC	RL	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND	2.47	ND
CHLOROMETHANE	74-87-3	0.500	ND	1.03	ND
DICHLOROTETRAFLUOROETHANE	76-14-2	0.500	ND	3.50	ND
VINYL CHLORIDE	75-01-4	0.500	ND	1.28	ND
BROMOMETHANE	74-83-9	0.500	ND	1.94	ND
CHLOROETHANE	75-00-3	0.500	ND	1.32	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND	2.81	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND	1.98	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND	3.83	ND
METHYLENE CHLORIDE	75-09-2	0.500	ND	1.74	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND	1.98	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND	2.02	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND	1.98	ND
CHLOROFORM	67-66-3	0.500	ND	2.44	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND	2.73	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND	2.02	ND
BENZENE	71-43-2	0.500	ND	1.60	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND	3.15	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND	2.31	ND
TRICHLOROETHENE	79-01-8	0.500	ND	2.69	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND	2.27	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND	2.27	ND
TOLUENE	108-88-3	0.500	ND	1.88	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND	2.73	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND	3.84	ND
TETRACHLOROETHENE	127-18-4	0.500	ND	3.39	ND
CHLOROBENZENE	108-90-7	0.500	ND	2.30	ND
ETHYLBENZENE	100-41-4	0.500	ND	2.17	ND
XYLENE (M+P)	179601-23-1	1.00	ND	4.34	ND
STYRENE	100-42-5	0.500	ND	2.13	ND
XYLENE (O)	95-47-6	0.500	ND	2.17	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND	3.43	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND	2.46	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND	2.46	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND	3.01	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND	3.01	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND	3.01	ND
1,2,4-TRICHLOROBENZENE	120-82-1	0.500	ND	3.71	ND
NAPHTHALENE	91-20-3	0.500	ND	2.62	ND
HEXACHLOROBUTADIENE	87-68-3	0.500	ND	5.33	ND

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

MRL - METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

µg/cu. m VALUES ARE CALCULATED FROM PPB RESULTS USING NORMAL TEMPERATURE AND PRESSURE (NPT).

**K PRIME, INC.**  
**LABORATORY QUALITY CONTROL REPORT**

**LAB CONTROL ID:** L022422A1  
**LAB CONTROL DUPLICATE ID:** D022422A1

**METHOD:** VOCs IN AIR  
**REFERENCE:** EPA METHOD TO 15 (GC-MS-SCAN)

**SAMPLE TYPE:** AIR  
**BATCH ID:** 022422A1  
**DATE ANALYZED:** 2/24/2022

COMPOUND NAME	SPIKE ADDED (PPB)	REPORTING LIMIT (PPB)	SAMPLE CONC (PPB)	SPIKE CONC (PPB)	SPIKE REC (%)	REC LIMITS (%)
1,1-DICHLOROETHENE	10.0	0.500	ND	10.8	108	60 - 140
BENZENE	10.0	0.500	ND	9.50	95	60 - 140
TRICHLOROETHENE	10.0	0.500	ND	9.87	99	60 - 140
TOLUENE	10.0	0.500	ND	9.03	90	60 - 140
TETRACHLOROETHENE	10.0	0.500	ND	9.88	99	60 - 140

COMPOUND NAME	SPIKE ADDED (PPB)	SPIKE DUP CONC (PPB)	SPIKE DUP REC (%)	RPD (%)	RPD (%)	QC LIMITS REC (%)
1,1-DICHLOROETHENE	10.0	10.8	108	0.1	25	60 - 140
BENZENE	10.0	9.22	92	3.0	25	60 - 140
TRICHLOROETHENE	10.0	9.93	99	0.6	25	60 - 140
TOLUENE	10.0	9.10	91	0.8	25	60 - 140
TETRACHLOROETHENE	10.0	9.98	100	1.0	25	60 - 140

**NOTES:**

NA - NOT APPLICABLE OR AVAILABLE

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**SAMPLE ID:** B022822A3  
**SPIKE ID:** L022822A3  
**DUPLICATE ID:** D022822A3  
**BATCH NO:** 022822A3  
**DATE ANALYZED:** 02/28/2022

**METHOD:** HELIUM  
**REFERENCE:** ASTM D 1946

**SAMPLE TYPE:** AIR  
**UNITS:** %-V

**METHOD BLANK**

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
HELIUM	0.100	ND

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
HELIUM	10.0	ND	9.91	99	70-130

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
HELIUM	0.100	9.91	10.3	3.9	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**SAMPLE ID:** B030122A2  
**SPIKE ID:** L030122A2  
**DUPLICATE ID:** D030122A2  
**BATCH NO:** 030122A2  
**DATE ANALYZED:** 03/01/2022

**METHOD:** METHANE, OXYGEN, NITROGEN (BALANCE)  
**REFERENCE:** ASTM D 1946

**SAMPLE TYPE:** AIR  
**UNITS:** %-V

**METHOD BLANK**

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
METHANE	0.0500	ND
OXYGEN	0.500	ND

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
METHANE	50.0	ND	48.1	96	85-115
OXYGEN	10.0	ND	10.4	104	85-115
NITROGEN (BALANCE)	40.0	ND	41.5	104	85-115

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
METHANE	0.0500	48.1	48.4	0.6	±10
OXYGEN	0.500	10.4	10.4	0.0	±10
NITROGEN (BALANCE)	0.500	41.5	41.2	0.7	±10

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**SAMPLE ID:** B022822A2  
**SPIKE ID:** L022822A2  
**DUPLICATE ID:** D022822A2  
**BATCH NO:** 022822A2  
**DATE ANALYZED:** 2/28/2022

**METHOD:** CARBON DIOXIDE  
**REFERENCE:** ASTM D 1946

**SAMPLE TYPE:** AIR  
**UNITS:** %-V

**METHOD BLANK**

COMPOUND NAME	REPORTING LIMIT	SAMPLE RESULT
CARBON DIOXIDE	0.100	ND

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
CARBON DIOXIDE	1.00	ND	0.968	97	70-130

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
CARBON DIOXIDE	0.100	0.968	0.976	0.8	±20


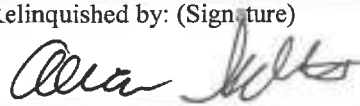
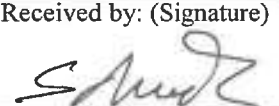

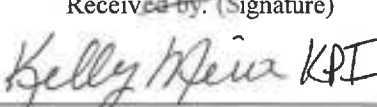
**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT AVAILABLE OR APPLICABLE

## SAMPLE ANALYSIS/COMPOSITE REQUEST FORM

### CHAIN-OF-CUSTODY

Invoice to: WEST, Inc.							Date: 2/25/22		Page 6 of 1						
Project: Regis. Hayward Park; WO 21.02 Task 2							Location: 401 Concar Dr., San Mateo, CA								
Project Manager: Sharon Squire, WEST, Inc.							Phone: 415/460-6770		Fax: 415/460-6771						
Laboratory: KPrime, Inc, Santa Rosa, CA							Turnaround time (days)		1	2	3	5	7	10	Std.
Sampler Signature: 															X
Analyses Requested															
Sample ID	KPI #	Date	Time	Type	# Containers	Composite	VOCs (TO-15)	Helium (ASTM D 1946)	Oxygen, CO2, Methane (RSK 175)	EDF					HOLD
W-28-4'	229084	2/25/22	1041	SG	1	--	X	X	X	X					
W-29-4'	229085	2/25/22	0944	SG	1	--	X	X	X	X					
W-30-4'	229086	2/25/22	0853	SG	1	--	X	X	X	X					
W-32-4'	229087	2/24/22	1547	SG	1	--	X	X	X	X					
W-34-4'	229088	2/24/22	1115	SG	1	--	X	X	X	X					
W-35-4'	229089	2/24/22	1408	SG	1	--	X	X	X	X					
W-36-2.5'	229090	2/24/22	1453	SG	1	--	X	X	X	X					
W-37-4'	229091	2/25/22	0750	SG	1	--	X	X	X	X					
022522-4'	229092	2/25/22	0100	SG	1	--	X	--	--	X					
NOTES: Dispose of samples after 30-days							<input checked="" type="checkbox"/> EDF		Log Code: WESS						
							Global ID: T10000008604								
Relinquished by: (Signature)				Date/Time			Received by: (Signature)				Date/Time				
				2/25/22 1415							2/25/22 1415				
Relinquished by: (Signature)				Date/Time			Received by: (Signature)				Date/Time				
				2/25/22 1504			 KPI				2/25/22 1504				



K PRIME INC.

## LABORATORY TEST REPORT

**ACCT:** 9946

**TO:** MS. SHARON SQUIRE  
WEST ENVIRONMENTAL S&T  
711 GRAND AVENUE, SUITE 220  
SAN RAFAEL, CA 94901

Phone: 415-460-6770  
Email: [main@westenvironmental.com](mailto:main@westenvironmental.com)

**FROM:** Richard A. Kagel, Ph.D. *RAK*  
Laboratory Director *by AB*  
*3/1/22*

**SUBJECT:** LABORATORY RESULTS FOR YOUR PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

The following samples were received at our laboratory on February 25, 2022.

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
W-25-12'	WATER	2/23/2022	11:54	229048
W-26-14'	WATER	2/24/2022	12:30	229049
W-27-12'	WATER	2/23/2022	9:35	229050
022322-GRAB	WATER	2/23/2022	2:00	229051

Test results included in this report meet the requirements of ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board (ANAB), and/or the requirements of the California Environmental Laboratory Accreditation Program (CA-ELAP), as applicable. Refer to certificates and scopes of accreditation AT-1427 (ANAB) and CA-ELAP #1532.

Results relate only to the samples tested. This test report shall not be reproduced except in full, without written permission of the laboratory.

If there are questions or concerns regarding this report, please contact your laboratory representative.

**K Prime, Inc.**

3621 Westwind Blvd.  
Santa Rosa, CA 95403

Tel: (707)-527-7574 Fax: (707)-527-7879



**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: W-25-12'  
LAB NO: 229048  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 11:54  
BATCH NO: 021622W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	20.0	ND
CHLOROMETHANE	74-87-3	20.0	ND
VINYL CHLORIDE	75-01-4	20.0	ND
BROMOMETHANE	74-83-9	20.0	ND
CHLOROETHANE	75-00-3	20.0	ND
TRICHLOROFLUOROMETHANE	75-69-4	20.0	ND
1,1-DICHLOROETHENE	75-35-4	20.0	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	20.0	ND
METHYLENE CHLORIDE	75-09-2	100	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	20.0	ND
1,1-DICHLOROETHANE	75-34-3	20.0	ND
CIS-1,2-DICHLOROETHENE	156-59-2	20.0	ND
2,2-DICHLOROPROPANE	594-20-7	20.0	ND
BROMOCHLOROMETHANE	74-97-5	20.0	ND
CHLOROFORM	67-66-3	20.0	ND
1,1,1-TRICHLOROETHANE	71-55-6	20.0	ND
CARBON TETRACHLORIDE	56-23-5	20.0	ND
1,1-DICHLOROPROPENE	563-58-6	20.0	ND
BENZENE	71-43-2	20.0	ND
1,2-DICHLOROETHANE	107-06-2	20.0	2610
TRICHLOROETHENE	79-01-6	20.0	ND
1,2-DICHLOROPROPANE	78-87-5	20.0	ND
DIBROMOMETHANE	74-95-3	20.0	ND
BROMODICHLOROMETHANE	75-27-4	20.0	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	20.0	ND
TOLUENE	108-88-3	20.0	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	20.0	ND
1,1,2-TRICHLOROETHANE	79-00-5	20.0	ND
TETRACHLOROETHENE	127-18-4	20.0	ND
1,3-DICHLOROPROPANE	142-28-9	20.0	ND
DIBROMOCHLOROMETHANE	124-48-1	20.0	ND
1,2-DIBROMOETHANE	106-93-4	20.0	ND
CHLOROBENZENE	108-90-7	20.0	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	20.0	ND
ETHYLBENZENE	100-41-4	20.0	ND
XYLENE (M+P)	1330-20-7	20.0	ND
XYLENE (O)	1330-20-7	20.0	ND
STYRENE	100-42-5	20.0	ND
BROMOFORM	75-25-2	20.0	ND
ISOPROPYLBENZENE	98-82-8	20.0	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	20.0	ND
BROMOBENZENE	108-86-1	20.0	ND
1,2,3-TRICHLOROPROPANE	96-18-4	20.0	ND
N-PROPYLBENZENE	103-65-1	20.0	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-25-12'**  
**LAB NO: 229048**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 11:54**  
**BATCH NO: 021622W1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	20.0	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	20.0	ND
4-CHLOROTOLUENE	106-43-4	20.0	ND
TERT-BUTYLBENZENE	98-06-6	20.0	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	20.0	ND
SEC-BUTYLBENZENE	135-98-8	20.0	ND
1,3-DICHLOROBENZENE	541-73-1	20.0	ND
4-ISOPROPYLTOLUENE	99-87-6	20.0	ND
1,4-DICHLOROBENZENE	106-46-7	20.0	ND
N-BUTYLBENZENE	104-51-8	20.0	ND
1,2-DICHLOROBENZENE	95-50-1	20.0	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	20.0	ND
1,2,4-TRICHLOROBENZENE	120-82-1	40.0	ND
HEXACHLOROBUTADIENE	87-68-3	40.0	ND
NAPHTHALENE	91-20-3	40.0	ND
1,2,3-TRICHLOROBENZENE	87-61-6	40.0	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	95
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: W-26-14'  
LAB NO: 229049  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 12:30  
BATCH NO: 021622W1

DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	1.00	ND
CHLOROMETHANE	74-87-3	1.00	ND
VINYL CHLORIDE	75-01-4	1.00	ND
BROMOMETHANE	74-83-9	1.00	ND
CHLOROETHANE	75-00-3	1.00	ND
TRICHLOROFLUOROMETHANE	75-69-4	1.00	ND
1,1-DICHLOROETHENE	75-35-4	1.00	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	1.00	ND
METHYLENE CHLORIDE	75-09-2	5.00	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	1.00	ND
1,1-DICHLOROETHANE	75-34-3	1.00	ND
CIS-1,2-DICHLOROETHENE	156-59-2	1.00	ND
2,2-DICHLOROPROPANE	594-20-7	1.00	ND
BROMOCHLOROMETHANE	74-97-5	1.00	ND
CHLOROFORM	67-66-3	1.00	ND
1,1,1-TRICHLOROETHANE	71-55-6	1.00	ND
CARBON TETRACHLORIDE	56-23-5	1.00	ND
1,1-DICHLOROPROPENE	563-58-6	1.00	ND
BENZENE	71-43-2	1.00	2.12
1,2-DICHLOROETHANE	107-06-2	1.00	40.8
TRICHLOROETHENE	79-01-6	1.00	ND
1,2-DICHLOROPROPANE	78-87-5	1.00	ND
DIBROMOMETHANE	74-95-3	1.00	ND
BROMODICHLOROMETHANE	75-27-4	1.00	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	1.00	ND
TOLUENE	108-88-3	1.00	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	1.00	ND
1,1,2-TRICHLOROETHANE	79-00-5	1.00	ND
TETRACHLOROETHENE	127-18-4	1.00	ND
1,3-DICHLOROPROPANE	142-28-9	1.00	ND
DIBROMOCHLOROMETHANE	124-48-1	1.00	ND
1,2-DIBROMOETHANE	106-93-4	1.00	ND
CHLOROBENZENE	108-90-7	1.00	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	1.00	ND
ETHYLBENZENE	100-41-4	1.00	1.34
XYLENE (M+P)	1330-20-7	1.00	ND
XYLENE (O)	1330-20-7	1.00	ND
STYRENE	100-42-5	1.00	ND
BROMOFORM	75-25-2	1.00	ND
ISOPROPYLBENZENE	98-82-8	1.00	1.94
1,1,2,2-TETRACHLOROETHANE	79-34-5	1.00	ND
BROMOBENZENE	108-86-1	1.00	ND
1,2,3-TRICHLOROPROPANE	96-18-4	1.00	ND
N-PROPYLBENZENE	103-65-1	1.00	2.24

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-26-14'**  
**LAB NO: 229049**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 12:30**  
**BATCH NO: 021622W1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	1.00	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	1.00	1.01
4-CHLOROTOLUENE	106-43-4	1.00	ND
TERT-BUTYLBENZENE	98-06-6	1.00	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	1.00	1.66
SEC-BUTYLBENZENE	135-98-8	1.00	ND
1,3-DICHLOROBENZENE	541-73-1	1.00	ND
4-ISOPROPYLTOLUENE	99-87-6	1.00	ND
1,4-DICHLOROBENZENE	106-46-7	1.00	ND
N-BUTYLBENZENE	104-51-8	1.00	ND
1,2-DICHLOROBENZENE	95-50-1	1.00	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	1.00	ND
1,2,4-TRICHLOROBENZENE	120-82-1	2.00	ND
HEXACHLOROBUTADIENE	87-68-3	2.00	ND
NAPHTHALENE	91-20-3	2.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	2.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	96
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	100

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: W-27-12'  
LAB NO: 229050  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 09:35  
BATCH NO: 021622W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-27-12'**  
**LAB NO: 229050**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 09:35**  
**BATCH NO: 021622W1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	93
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: 022322-GRAB  
LAB NO: 229051  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 02:00  
BATCH NO: 021622W1  
DATE ANALYZED: 03/01/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	20.0	ND
CHLOROMETHANE	74-87-3	20.0	ND
VINYL CHLORIDE	75-01-4	20.0	ND
BROMOMETHANE	74-83-9	20.0	ND
CHLOROETHANE	75-00-3	20.0	ND
TRICHLOROFLUOROMETHANE	75-69-4	20.0	ND
1,1-DICHLOROETHENE	75-35-4	20.0	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	20.0	ND
METHYLENE CHLORIDE	75-09-2	100	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	20.0	ND
1,1-DICHLOROETHANE	75-34-3	20.0	ND
CIS-1,2-DICHLOROETHENE	156-59-2	20.0	ND
2,2-DICHLOROPROPANE	594-20-7	20.0	ND
BROMOCHLOROMETHANE	74-97-5	20.0	ND
CHLOROFORM	67-66-3	20.0	ND
1,1,1-TRICHLOROETHANE	71-55-6	20.0	ND
CARBON TETRACHLORIDE	56-23-5	20.0	ND
1,1-DICHLOROPROPENE	563-58-6	20.0	ND
BENZENE	71-43-2	20.0	ND
1,2-DICHLOROETHANE	107-06-2	20.0	2740
TRICHLOROETHENE	79-01-6	20.0	ND
1,2-DICHLOROPROPANE	78-87-5	20.0	ND
DIBROMOMETHANE	74-95-3	20.0	ND
BROMODICHLOROMETHANE	75-27-4	20.0	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	20.0	ND
TOLUENE	108-88-3	20.0	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	20.0	ND
1,1,2-TRICHLOROETHANE	79-00-5	20.0	ND
TETRACHLOROETHENE	127-18-4	20.0	ND
1,3-DICHLOROPROPANE	142-28-9	20.0	ND
DIBROMOCHLOROMETHANE	124-48-1	20.0	ND
1,2-DIBROMOETHANE	106-93-4	20.0	ND
CHLOROBENZENE	108-90-7	20.0	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	20.0	ND
ETHYLBENZENE	100-41-4	20.0	ND
XYLENE (M+P)	1330-20-7	20.0	ND
XYLENE (O)	1330-20-7	20.0	ND
STYRENE	100-42-5	20.0	ND
BROMOFORM	75-25-2	20.0	ND
ISOPROPYLBENZENE	98-82-8	20.0	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	20.0	ND
BROMOBENZENE	108-86-1	20.0	ND
1,2,3-TRICHLOROPROPANE	96-18-4	20.0	ND
N-PROPYLBENZENE	103-65-1	20.0	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: 022322-GRAB**  
**LAB NO: 229051**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 02:00**  
**BATCH NO: 021622W1**  
**DATE ANALYZED: 03/01/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	20.0	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	20.0	ND
4-CHLOROTOLUENE	106-43-4	20.0	ND
TERT-BUTYLBENZENE	98-06-6	20.0	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	20.0	ND
SEC-BUTYLBENZENE	135-98-8	20.0	ND
1,3-DICHLOROBENZENE	541-73-1	20.0	ND
4-ISOPROPYLTOLUENE	99-87-6	20.0	ND
1,4-DICHLOROBENZENE	106-46-7	20.0	ND
N-BUTYLBENZENE	104-51-8	20.0	ND
1,2-DICHLOROBENZENE	95-50-1	20.0	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	20.0	ND
1,2,4-TRICHLOROBENZENE	120-82-1	40.0	ND
HEXACHLOROBUTADIENE	87-68-3	40.0	ND
NAPHTHALENE	91-20-3	40.0	ND
1,2,3-TRICHLOROBENZENE	87-61-6	40.0	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	92
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	97

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021622W1

BATCH NO: 021622W1

DATE ANALYZED: 02/16/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: WATER

REFERENCE: EPA 5030/8260

UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND
2-CHLOROTOLUENE	95-49-8	0.500	ND

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**METHOD BLANK ID:** B021622W1  
**BATCH NO:** 021622W1  
**DATE ANALYZED:** 02/16/2022

**METHOD:** VOLATILE ORGANIC COMPOUNDS  
**REFERENCE:** EPA 5030/8260

**SAMPLE TYPE:** WATER  
**UNITS:** ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	99
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	90

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE ID: B021622W1**  
**SPIKE ID: L021622W1**  
**DUPLICATE ID: D021622W1**  
**BATCH NO: 021622W1**  
**SAMPLE TYPE: WATER**  
**UNITS: µg/L**

**ACCURACY (MATRIX SPIKE)**

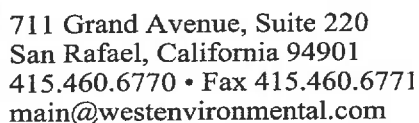
COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
1,1 DICHLOROETHENE	10.0	ND	8.24	82	60-140
BENZENE	10.0	ND	8.98	90	60-140
TRICHLOROETHENE	10.0	ND	8.19	82	60-140
TOLUENE	10.0	ND	8.89	89	60-140
CHLOROBENZENE	10.0	ND	8.72	87	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
1,1 DICHLOROETHENE	0.500	8.24	8.39	1.8	±20
BENZENE	0.500	8.98	8.87	1.2	±20
TRICHLOROETHENE	0.500	8.19	8.33	1.7	±20
TOLUENE	0.500	8.89	8.79	1.1	±20
CHLOROBENZENE	0.500	8.72	8.60	1.4	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

[illegible]



K PRIME INC.

## LABORATORY TEST REPORT

**ACCT:** 9946

**TO:** MS. SHARON SQUIRE  
WEST ENVIRONMENTAL S&T  
711 GRAND AVENUE, SUITE 220  
SAN RAFAEL, CA 94901

Phone: 415-460-6770  
Email: [main@westenvironmental.com](mailto:main@westenvironmental.com)

**FROM:** Richard A. Kagel, Ph.D.  
Laboratory Director

*RHK  
by AB  
3/1/22*

**SUBJECT:** LABORATORY RESULTS FOR YOUR PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

The following samples were received at our laboratory on February 28, 2022.

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
W-33-2.5-GW	WATER	2/28/2022	10:35	229117
TRIP BLANK	WATER	2/28/2022	10:40	229118

Test results included in this report meet the requirements of ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board (ANAB), and/or the requirements of the California Environmental Laboratory Accreditation Program (CA-ELAP), as applicable. Refer to certificates and scopes of accreditation AT-1427 (ANAB) and CA-ELAP #1532.

Results relate only to the samples tested. This test report shall not be reproduced except in full, without written permission of the laboratory.

If there are questions or concerns regarding this report, please contact your laboratory representative.

**K Prime, Inc.**

3621 Westwind Blvd.  
Santa Rosa, CA 95403

Tel: (707)-527-7574 Fax: (707)-527-7879

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-33-2.5-GW**  
**LAB NO: 229117**  
**DATE SAMPLED: 02/28/2022**  
**TIME SAMPLED: 10:35**  
**BATCH NO: 021822W1**  
**DATE ANALYZED: 03/01/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: W-33-2.5-GW**  
**LAB NO: 229117**  
**DATE SAMPLED: 02/28/2022**  
**TIME SAMPLED: 10:35**  
**BATCH NO: 021822W1**  
**DATE ANALYZED: 03/01/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	91
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	97

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021822W1

BATCH NO: 021822W1

DATE ANALYZED: 02/18/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: WATER

REFERENCE: EPA 5030/8260

UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND
2-CHLOROTOLUENE	95-49-8	0.500	ND

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021822W1

BATCH NO: 021822W1

DATE ANALYZED: 02/18/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: WATER

REFERENCE: EPA 5030/8260

UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

**SURROGATE RECOVERY**

%

DIBROMOFLUOROMETHANE	97
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	102

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE ID: B021822W1**  
**SPIKE ID: L021822W1**  
**DUPLICATE ID: D021822W1**  
**BATCH NO: 021822W1**  
**SAMPLE TYPE: WATER**  
**UNITS: µg/L**

**ACCURACY (MATRIX SPIKE)**

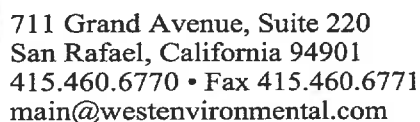
COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
1,1 DICHLOROETHENE	10.0	ND	7.39	74	60-140
BENZENE	10.0	ND	7.94	79	60-140
TRICHLOROETHENE	10.0	ND	8.11	81	60-140
TOLUENE	10.0	ND	8.48	85	60-140
CHLOROBENZENE	10.0	ND	8.26	83	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
1,1 DICHLOROETHENE	0.500	7.39	7.27	1.6	±20
BENZENE	0.500	7.94	7.95	0.1	±20
TRICHLOROETHENE	0.500	8.11	8.14	0.4	±20
TOLUENE	0.500	8.48	8.49	0.1	±20
CHLOROBENZENE	0.500	8.26	8.38	1.4	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE



9946

<b>Invoice to:</b> WEST, Inc.							<b>Date:</b>	2/28/22						<b>Page</b>	of 1									
<b>Project:</b> Regis.HaywardPark; WO 21.02 Task 2							<b>Location:</b> 401 Concar Dr., San Mateo, CA																	
<b>Project Manager:</b> Sharon Squire, WEST, Inc.							<b>Phone:</b> 415/460-6770									<b>Fax:</b> 415/460-6771								
<b>Laboratory:</b> KPrime, Inc, Santa Rosa, CA							<b>Turnaround time</b>				1		2		3		5		7		10		<b>Std.</b>	
<b>Sampler Signature:</b>							(days)																X	
							<b>Analyses Requested</b>																	
Sample ID	KPI #	Date	Time	Type	# Containers	Composite	VOCs (5035/8260B)	EDF													HOLD			
W-33-2.5-G <sup>w</sup>	229117	2/28/22	1035	W	4	-	X	X																
Trip Blank	229118	2/29/22	1640	W	2	-															X			
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
						--																		
<b>NOTES:</b> Dispose of samples after 30-days							<input checked="" type="checkbox"/> EDF		<b>Log Code:</b> WESS															
							<b>Global ID:</b>		T10000008604															
<b>Relinquished by: (Signature)</b>				<b>Date/Time</b>			<b>Received by: (Signature)</b>				<b>Date/Time</b>													
				2/28/22 1315							2/28/22 1315													
<b>Relinquished by: (Signature)</b>				<b>Date/Time</b>			<b>Received by: (Signature)</b>				<b>Date/Time</b>													
				2/28/22 1410							2/28/22 1410													



K PRIME INC.

## LABORATORY TEST REPORT

ACCT: 9946

TO: MS. SHARON SQUIRE  
WEST ENVIRONMENTAL S&T  
711 GRAND AVENUE, SUITE 220  
SAN RAFAEL, CA 94901

Phone: 415-460-6770  
Email: [main@westenvironmental.com](mailto:main@westenvironmental.com)

FROM: Richard A. Kagel, Ph.D. *RAK*  
Laboratory Director *by AB*  
*3/3/22*

SUBJECT: LABORATORY RESULTS FOR YOUR PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

The following samples were received at our laboratory on February 25, 2022.

SAMPLE ID	TYPE	DATE	TIME	KPI LAB #
MW-1	WATER	2/23/2022	16:20	229052
MW-2	WATER	2/23/2022	10:45	229053
MW-3	WATER	2/24/2022	11:05	229054
MW-4	WATER	2/23/2022	13:32	229055
MW-5	WATER	2/24/2022	8:53	229056
MW-6	WATER	2/23/2022	15:22	229057
MW-7	WATER	2/23/2022	14:26	229058
MW-8	WATER	2/24/2022	10:17	229059
MW-9	WATER	2/24/2022	12:25	229060
022422-MW	WATER	2/24/2022	8:00	229061

Test results included in this report meet the requirements of ISO/IEC 17025:2017 as verified by the ANSI-ASQ National Accreditation Board (ANAB), and/or the requirements of the California Environmental Laboratory Accreditation Program (CA-ELAP), as applicable. Refer to certificates and scopes of accreditation AT-1427 (ANAB) and CA-ELAP #1532.

Results relate only to the samples tested. This test report shall not be reproduced except in full, without written permission of the laboratory.

If there are questions or concerns regarding this report, please contact your laboratory representative.

K Prime, Inc.

3621 Westwind Blvd.  
Santa Rosa, CA 95403

Tel: (707)-527-7574 Fax: (707)-527-7879

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT:** 9946  
**CLIENT PROJECT:** REGIS.HAYWARDPARK; WO 21.02 TASK 2

**METHOD:** GRO-GASOLINE RANGE ORGANICS  
**REFERENCE:** EPA 8015B

**SAMPLE TYPE:** WATER  
**UNITS:** mg/L

SAMPLE ID	LAB NO.	DATE SAMPLED	TIME SAMPLED	BATCH NO	DATE ANALYZED	MRL	SAMPLE CONC	GRO PATTERN
MW-1	229052	02/23/2022	16:20	021822W1	02/25/2022	0.0500	ND	
MW-2	229053	02/23/2022	10:45	021822W1	02/25/2022	0.0500	ND	
MW-3	229054	02/24/2022	11:05	021822W1	02/25/2022	0.0500	ND	
MW-4	229055	02/23/2022	13:32	021822W1	02/25/2022	0.0500	ND	
MW-5	229056	02/24/2022	08:53	021822W1	02/25/2022	0.0500	ND	
MW-6	229057	02/23/2022	15:22	021822W1	02/25/2022	0.0500	ND	
MW-7	229058	02/23/2022	14:26	021822W1	02/25/2022	0.0500	ND	
MW-8	229059	02/24/2022	10:17	021822W1	02/25/2022	0.0500	ND	
MW-9	229060	02/24/2022	12:25	021822W1	02/25/2022	0.0500	0.0549	
022422-MW	229061	02/24/2022	08:00	021822W1	02/25/2022	0.0500	0.0508	

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED METHOD REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

MRL - METHOD REPORTING LIMIT

AE - UNKNOWN HYDROCARBON WITH A SINGLE PEAK

AN - UNKNOWN HYDROCARBON WITH SEVERAL PEAKS

AS - HEAVIER HYDROCARBON THAN GASOLINE CONTRIBUTING TO GRO VALUE

CO - HYDROCARBON RESPONSE IN GASOLINE RANGE BUT DOES NOT RESEMBLE GASOLINE

APPROVED BY: 

DATE: 3/1/2022



**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-1  
LAB NO: 229052  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 16:20  
BATCH NO: 021722W1

DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-8	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: MW-1**  
**LAB NO: 229052**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 16:20**  
**BATCH NO: 021722W1**

**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	94
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-2  
LAB NO: 229053  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 10:45  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-2  
LAB NO: 229053  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 10:45  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	97
TOLUENE-D8	99
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-3  
LAB NO: 229054  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 11:05  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	106-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-3  
LAB NO: 229054  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 11:05  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-8	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	91
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022



**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-4  
LAB NO: 229055  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 13:32  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND



**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-4  
LAB NO: 229055  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 13:32  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	92
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-5  
LAB NO: 229056  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 08:53  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: MW-5**  
**LAB NO: 229056**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 08:53**  
**BATCH NO: 021722W1**

**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	92
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	98

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

*PK*  
*3/1/2022*

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-6  
LAB NO: 229057  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 15:22  
BATCH NO: 021722W1

DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-88-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: MW-6**  
**LAB NO: 229057**  
**DATE SAMPLED: 02/23/2022**  
**TIME SAMPLED: 15:22**  
**BATCH NO: 021722W1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	93
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-7  
LAB NO: 229058  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 14:26  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-7  
LAB NO: 229058  
DATE SAMPLED: 02/23/2022  
TIME SAMPLED: 14:26  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	95
TOLUENE-D8	102
4-BROMOFLUOROBENZENE	101

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022



**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-8  
LAB NO: 229059  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 10:17  
BATCH NO: 021722W1

DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-8  
LAB NO: 229059  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 10:17  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	91
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY:   
DATE: 3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: MW-9  
LAB NO: 229060  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 12:25  
BATCH NO: 021722W1  
DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	0.530
1,2-DICHLOROETHANE	107-06-2	0.500	5.21
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	1.39
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: MW-9**  
**LAB NO: 229060**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 12:25**  
**BATCH NO: 021722W1**

**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-8	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-6	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	90
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	100

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

  
3/1/2022

**K PRIME, INC.**  
LABORATORY REPORT

K PRIME PROJECT: 9946  
CLIENT PROJECT:  
REGIS.HAYWARDPARK; WO 21.02 TASK 2

SAMPLE ID: 022422-MW  
LAB NO: 229061  
DATE SAMPLED: 02/24/2022  
TIME SAMPLED: 08:00  
BATCH NO: 021722W1

DATE ANALYZED: 02/28/2022

METHOD: VOLATILE ORGANIC COMPOUNDS  
REFERENCE: EPA 5030/8260

SAMPLE TYPE: WATER  
UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	0.540
1,2-DICHLOROETHANE	107-06-2	0.500	5.08
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	1.74
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	0.500
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND

**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT:**  
**REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**SAMPLE ID: 022422-MW**  
**LAB NO: 229061**  
**DATE SAMPLED: 02/24/2022**  
**TIME SAMPLED: 08:00**  
**BATCH NO: 021722W1**  
**DATE ANALYZED: 02/28/2022**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE TYPE: WATER**  
**UNITS: ug/L**

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
2-CHLOROTOLUENE	95-49-8	0.500	ND
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	106-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-8	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-8	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	88
TOLUENE-D8	100
4-BROMOFLUOROBENZENE	101

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA -NOT APPLICABLE OR AVAILABLE

APPROVED BY: 

DATE: 3/1/2022



**K PRIME, INC.**  
**LABORATORY REPORT**

**K PRIME PROJECT: 9946**  
**CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2**

**METHOD: DRO**  
**REFERENCE: EPA 8015B**

**SAMPLE TYPE: WATER**  
**UNITS: mg/L**

SAMPLE ID	LAB NO.	DATE SAMPLED	BATCH ID	EXTRACT DATE	DATE ANALYZED	MRL	SAMPLE CONC	DRO PATTERN
MW-1	229052	02/23/2022	021522W1	02/28/2022	02/28/2022	0.0532	0.434	
MW-2	229053	02/23/2022	021522W1	02/28/2022	02/28/2022	0.0568	1.13	AC
MW-3	229054	02/24/2022	021522W1	02/28/2022	03/01/2022	0.0541	1.52	
MW-4	229055	02/23/2022	021522W1	02/28/2022	03/01/2022	0.0526	1.14	
MW-5	229056	02/24/2022	021522W1	02/28/2022	03/01/2022	0.0581	3.32	
MW-6	229057	02/23/2022	022822W1	02/28/2022	03/01/2022	0.0556	2.72	
MW-7	229058	02/23/2022	022822W1	02/28/2022	03/01/2022	0.0556	0.927	
MW-8	229059	02/24/2022	022822W1	02/28/2022	03/01/2022	0.0575	0.470	AC
MW-9	229060	02/24/2022	022822W1	02/28/2022	03/01/2022	0.0526	3.41	AN

**NOTES:**

DRO Diesel Range Organics (C12-C23)  
 ND Not Detected at or above the stated MRL  
 NA Not Applicable or Available  
 MRL Method Reporting Limit  
 AD Typical Pattern for Diesel  
 AM Hydrocarbon response is in the C12-C22 range  
 AC Heavier hydrocarbons contributing to diesel range quantitation  
 AJ Heavier hydrocarbon than diesel  
 AK Lighter hydrocarbon than diesel  
 AE Unknown hydrocarbon with a single peak  
 AN Unknown hydrocarbon with several peaks

**APPROVED BY:** AB  
**DATE:** 3/3/22



**K PRIME, INC.**  
**LABORATORY REPORT**

K PRIME PROJECT: 9946  
 CLIENT PROJECT: REGIS.HAYWARDPARK; WO 21.02 TASK 2

METHOD: HRO  
 REFERENCE: EPA 8015B

SAMPLE TYPE: WATER  
 UNITS: mg/L

SAMPLE ID	LAB NO.	DATE SAMPLED	BATCH ID	EXTRACT DATE	DATE ANALYZED	MRL	SAMPLE CONC	HRO PATTERN
MW-1	229052	02/23/2022	021522W1	02/28/2022	02/28/2022	0.0532	0.170	
MW-2	229053	02/23/2022	021522W1	02/28/2022	02/28/2022	0.0568	1.14	
MW-3	229054	02/24/2022	021522W1	02/28/2022	03/01/2022	0.0541	1.12	
MW-4	229055	02/23/2022	021522W1	02/28/2022	03/01/2022	0.0526	0.924	
MW-5	229056	02/24/2022	021522W1	02/28/2022	03/01/2022	0.0581	2.37	
MW-6	229057	02/23/2022	022822W1	02/28/2022	03/01/2022	0.0556	1.68	
MW-7	229058	02/23/2022	022822W1	02/28/2022	03/01/2022	0.0556	0.624	
MW-8	229059	02/24/2022	022822W1	02/28/2022	03/01/2022	0.0575	0.585	
MW-9	229060	02/24/2022	022822W1	02/28/2022	03/01/2022	0.0526	0.766	

**NOTES:**

HRO Heavy Range Organics (C24-C34)  
 ND Not Detected at or above the stated MRL  
 NA Not Applicable or Available  
 MRL Method Reporting Limit  
 AE Unknown hydrocarbon with a single peak  
 AN Unknown hydrocarbon with several peaks

APPROVED BY: AB  
 DATE: 3/3/22

**K PRIME, INC.**  
**LABORATORY QUALITY CONTROL REPORT**

METHOD BLANK ID: B021822W1  
BATCH NO: 021822W1  
SAMPLE TYPE: WATER  
UNITS: mg/L

METHOD: GRO-GASOLINE RANGE ORGANICS  
REFERENCE: EPA 8015B

DATE EXTRACTED: 02/18/2022  
DATE ANALYZED: 02/18/2022

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
TPH-G	0.0500	ND

SAMPLE ID: L021822W1  
DUPLICATE ID: D021822W1  
BATCH NO: 021822W1  
SAMPLE TYPE: WATER  
UNITS: mg/L

DATE EXTRACTED: 02/18/2022  
DATE ANALYZED: 02/18/2022

**ACCURACY (MATRIX SPIKE)**

PARAMETER	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
TPH-G	0.500	ND	0.486	97	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
TPH-G	0.0500	0.486	0.485	0.2	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT APPLICABLE

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021722W1

BATCH NO: 021722W1

DATE ANALYZED: 02/17/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: WATER

REFERENCE: EPA 5030/8260

UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
DICHLORODIFLUOROMETHANE	75-71-8	0.500	ND
CHLOROMETHANE	74-87-3	0.500	ND
VINYL CHLORIDE	75-01-4	0.500	ND
BROMOMETHANE	74-83-9	0.500	ND
CHLOROETHANE	75-00-3	0.500	ND
TRICHLOROFLUOROMETHANE	75-69-4	0.500	ND
1,1-DICHLOROETHENE	75-35-4	0.500	ND
TRICHLOROTRIFLUOROETHANE	76-13-1	0.500	ND
METHYLENE CHLORIDE	75-09-2	2.50	ND
TRANS-1,2-DICHLOROETHENE	156-60-5	0.500	ND
1,1-DICHLOROETHANE	75-34-3	0.500	ND
CIS-1,2-DICHLOROETHENE	156-59-2	0.500	ND
2,2-DICHLOROPROPANE	594-20-7	0.500	ND
BROMOCHLOROMETHANE	74-97-5	0.500	ND
CHLOROFORM	67-66-3	0.500	ND
1,1,1-TRICHLOROETHANE	71-55-6	0.500	ND
CARBON TETRACHLORIDE	56-23-5	0.500	ND
1,1-DICHLOROPROPENE	563-58-6	0.500	ND
BENZENE	71-43-2	0.500	ND
1,2-DICHLOROETHANE	107-06-2	0.500	ND
TRICHLOROETHENE	79-01-6	0.500	ND
1,2-DICHLOROPROPANE	78-87-5	0.500	ND
DIBROMOMETHANE	74-95-3	0.500	ND
BROMODICHLOROMETHANE	75-27-4	0.500	ND
TRANS-1,3-DICHLOROPROPENE	10061-02-6	0.500	ND
TOLUENE	108-88-3	0.500	ND
CIS-1,3-DICHLOROPROPENE	10061-01-5	0.500	ND
1,1,2-TRICHLOROETHANE	79-00-5	0.500	ND
TETRACHLOROETHENE	127-18-4	0.500	ND
1,3-DICHLOROPROPANE	142-28-9	0.500	ND
DIBROMOCHLOROMETHANE	124-48-1	0.500	ND
1,2-DIBROMOETHANE	106-93-4	0.500	ND
CHLOROBENZENE	108-90-7	0.500	ND
1,1,1,2-TETRACHLOROETHANE	630-20-6	0.500	ND
ETHYLBENZENE	100-41-4	0.500	ND
XYLENE (M+P)	1330-20-7	0.500	ND
XYLENE (O)	1330-20-7	0.500	ND
STYRENE	100-42-5	0.500	ND
BROMOFORM	75-25-2	0.500	ND
ISOPROPYLBENZENE	98-82-8	0.500	ND
1,1,2,2-TETRACHLOROETHANE	79-34-5	0.500	ND
BROMOBENZENE	108-86-1	0.500	ND
1,2,3-TRICHLOROPROPANE	96-18-4	0.500	ND
N-PROPYLBENZENE	103-65-1	0.500	ND
2-CHLOROTOLUENE	95-49-8	0.500	ND

**K PRIME, INC.**

LABORATORY BATCH QC REPORT

METHOD BLANK ID: B021722W1

BATCH NO: 021722W1

DATE ANALYZED: 02/17/2022

METHOD: VOLATILE ORGANIC COMPOUNDS

SAMPLE TYPE: WATER

REFERENCE: EPA 5030/8260

UNITS: ug/L

COMPOUND NAME	CAS NO.	REPORTING LIMIT	SAMPLE CONC
1,3,5-TRIMETHYLBENZENE	108-67-8	0.500	ND
4-CHLOROTOLUENE	108-43-4	0.500	ND
TERT-BUTYLBENZENE	98-06-6	0.500	ND
1,2,4-TRIMETHYLBENZENE	95-63-6	0.500	ND
SEC-BUTYLBENZENE	135-98-8	0.500	ND
1,3-DICHLOROBENZENE	541-73-1	0.500	ND
4-ISOPROPYLTOLUENE	99-87-8	0.500	ND
1,4-DICHLOROBENZENE	106-46-7	0.500	ND
N-BUTYLBENZENE	104-51-8	0.500	ND
1,2-DICHLOROBENZENE	95-50-1	0.500	ND
1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	0.500	ND
1,2,4-TRICHLOROBENZENE	120-82-1	1.00	ND
HEXACHLOROBUTADIENE	87-68-3	1.00	ND
NAPHTHALENE	91-20-3	1.00	ND
1,2,3-TRICHLOROBENZENE	87-61-6	1.00	ND

SURROGATE RECOVERY	%
DIBROMOFLUOROMETHANE	94
TOLUENE-D8	101
4-BROMOFLUOROBENZENE	99

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA -NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
**LABORATORY BATCH QC REPORT**

**METHOD: VOLATILE ORGANIC COMPOUNDS**  
**REFERENCE: EPA 5030/8260**

**SAMPLE ID: B021722W1**  
**SPIKE ID: L021722W1**  
**DUPLICATE ID: D021722W1**  
**BATCH NO: 021722W1**  
**SAMPLE TYPE: WATER**  
**UNITS: µg/L**

**ACCURACY (MATRIX SPIKE)**

COMPOUND NAME	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
1,1 DICHLOROETHENE	10.0	ND	7.15	72	60-140
BENZENE	10.0	ND	7.62	76	60-140
TRICHLOROETHENE	10.0	ND	8.01	80	60-140
TOLUENE	10.0	ND	7.91	79	60-140
CHLOROBENZENE	10.0	ND	7.56	76	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
1,1 DICHLOROETHENE	0.500	7.15	7.16	0.1	±20
BENZENE	0.500	7.62	7.42	2.7	±20
TRICHLOROETHENE	0.500	8.01	7.92	1.1	±20
TOLUENE	0.500	7.91	7.85	0.8	±20
CHLOROBENZENE	0.500	7.56	7.41	2.0	±20

**NOTES:**

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT  
NA - NOT AVAILABLE OR APPLICABLE

**K PRIME, INC.**  
**LABORATORY QUALITY CONTROL REPORT**

BATCH ID: 021522W1  
DATE EXTRACTED: 02/15/2022  
DATE ANALYZED: 02/15/2022

METHOD: DRO  
REFERENCE: EPA 8015B

SAMPLE TYPE: WATER  
UNITS: mg/L

METHOD BLANK ID: B021522W1

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
DRO	0.0500	ND

SAMPLE ID: L021522W1  
DUPLICATE ID: D021522W1

**ACCURACY (MATRIX SPIKE)**

PARAMETER	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
DRO	2.50	ND	2.32	93	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
DRO	0.0500	2.32	2.40	3.4	±20

**NOTES:**

DRO - DIESEL RANGE ORGANICS (C12-C34)

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT

NA - NOT APPLICABLE OR AVAILABLE

**K PRIME, INC.**  
LABORATORY QUALITY CONTROL REPORT

BATCH ID: 022822W1  
DATE EXTRACTED: 02/28/2022  
DATE ANALYZED: 02/28/2022

METHOD: DRO  
REFERENCE: EPA 8015B

SAMPLE TYPE: WATER  
UNITS: mg/L

METHOD BLANK ID: B022822W1

COMPOUND NAME	REPORTING LIMIT	SAMPLE CONC
DRO	0.0500	ND

SAMPLE ID: L022822W1  
DUPLICATE ID: D022822W1

**ACCURACY (MATRIX SPIKE)**

PARAMETER	SPIKE ADDED	SAMPLE RESULT	SPIKE RESULT	RECOVERY (%)	LIMITS (%)
DRO	2.50	ND	2.40	96	60-140

**PRECISION (SPIKE DUPLICATE)**

COMPOUND NAME	REPORTING LIMIT	SPIKE RESULT	DUPLICATE RESULT	RPD (%)	LIMITS (%)
DRO	0.0500	2.40	2.45	2.2	±20

**NOTES:**

DRO - DIESEL RANGE ORGANICS (C12-C34)

ND - NOT DETECTED AT OR ABOVE THE STATED REPORTING LIMIT


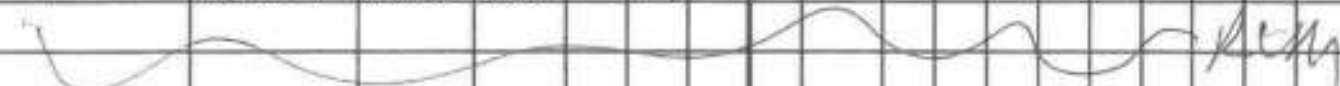
NA - NOT APPLICABLE OR AVAILABLE



## SAMPLE ANALYSIS/COMPOSITE REQUEST FORM

### CHAIN-OF-CUSTODY

9946

Invoice to: WEST, Inc.							Date: 2/24/22		Page 1 of 1							
Project: Regis.HaywardPark; WO 21.02 Task 2							Location: 401 Concar Dr., San Mateo, CA									
Project Manager: Sharon Squire, WEST, Inc.							Phone: 415/460-6770		Fax: 415/460-6771							
Laboratory: KPrime, Inc, Santa Rosa, CA							Turnaround time (days)		1	2	3	5	7	10	Std.	
Sampler Signature: 															X	
							Analyses Requested									
Sample ID	KPI #	Date	Time	Type	# Containers	Composite	TPHg (8015M)	TPHd and TPHmo (8015M) Reported Separately	VOCs (8035/8260B)	EDF						HOLD
MW-1	229052	2/23/22	1620	W	5	-	X	X	X	X						
MW-2	229053	2/23/22	1045	W	5	-	X	X	X	X						
MW-3	229054	2/24/22	1105	W	5	-	X	X	X	X						
MW-4	229055	2/23/22	1332	W	5	-	X	X	X	X						
MW-5	229056	2/24/22	0853	W	5	-	X	X	X	X						
MW-6	229057	2/23/22	1522	W	5	-	X	X	X	X						
MW-7	229058	2/23/22	1426	W	5	-	X	X	X	X						
MW-8	229059	2/24/22	1017	W	5	-	X	X	X	X						
MW-9	229060	2/21/22	1225	W	5	-	X	X	X	X						
022422-MW	229061	2/24/22	0800	W	84	-	-	-	X	X						
																

NOTES: Dispose of samples after 30-days

☒ EDF

Log Code: WESS

Global ID: T10000008604

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Date/Time